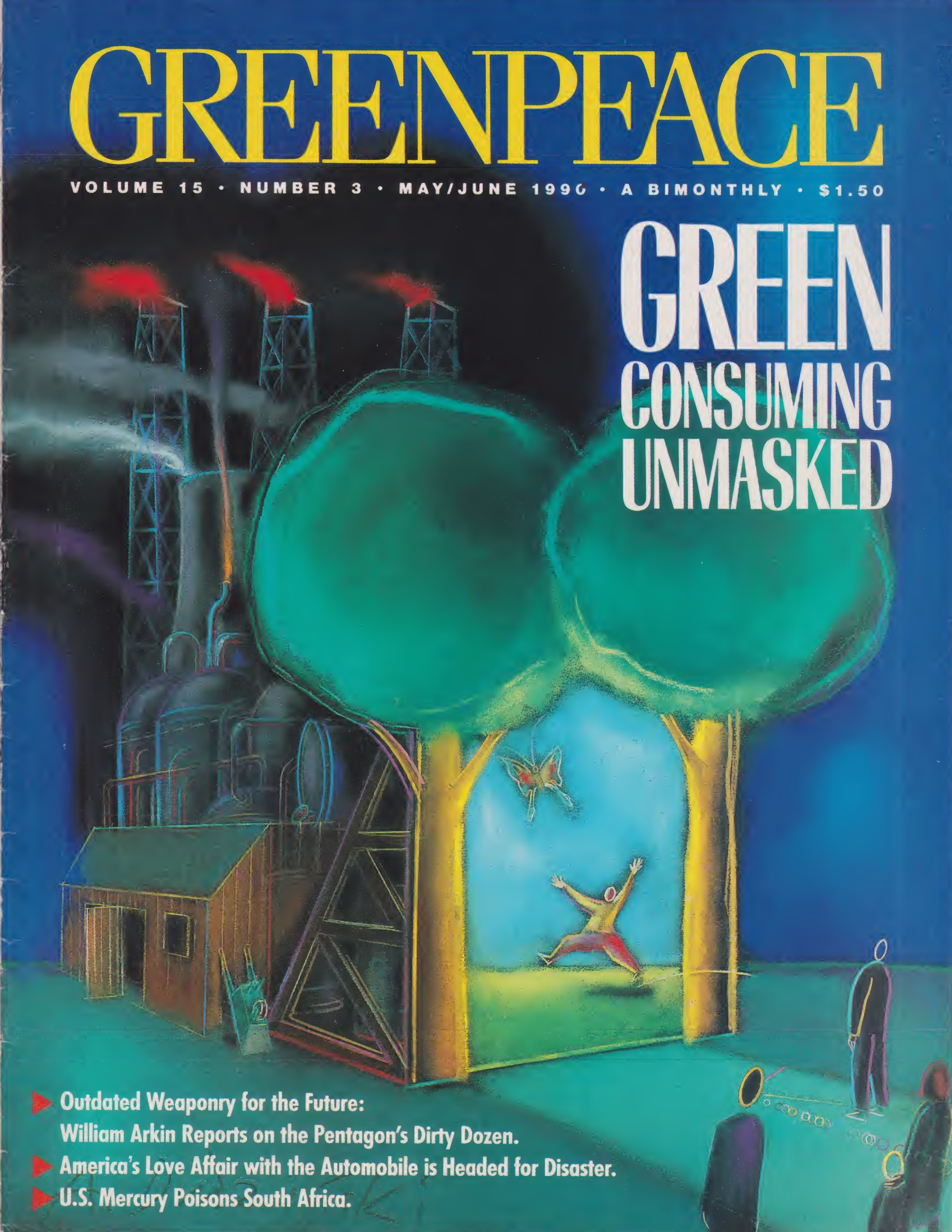


# GREENPEACE

VOLUME 15 • NUMBER 3 • MAY/JUNE 1996 • A BIMONTHLY • \$1.50

## GREEN CONSUMING UNMASKED

- 
- **Outdated Weaponry for the Future:**  
William Arkin Reports on the Pentagon's Dirty Dozen.
- **America's Love Affair with the Automobile is Headed for Disaster.**
- **U.S. Mercury Poisons South Africa.**



BY ANDRE CAROTHERS

IT IS WITH PROFOUNDLY MIXED FEELINGS that we greet the current enthusiasm for things green. On the one hand, none but the most jaded pessimist would toss off the current mood as superficial hype. After all, the world lurches forward on the crest of a trend far more readily than it does on the merits of a good argument. And frankly, what with the greenhouse effect, habitat destruction and all the other global catastrophes, we're not in a position to snub support from any corner.

On the other hand, with everyone and everything wrapped in gleaming green, the political terrain starts to look deceptively uniform,

and in the confusion a lot of destructive people and institutions get off the hook. The fact that everyone is an environmentalist, from pesticide-loving Mississippi Congressman Jamie Whitten to Waste Management

Incorporated to Maggie and George, makes it increasingly difficult for the public to draw useful distinctions. Fresh green paint provides camouflage for polluters and confuses voters and consumers, who are understandably pleased but easily misled when the people and institutions whose hands are at the helm profess an interest in the planet.

In the marketplace, Madison Avenue is taking the lead in orchestrating the awkward marriage of environmentalism and business-as-usual. Planetary stewardship, like every other trend that surfaces within earshot of an ad budget, is being served up as a commodity. According to the copywriters, garbage bags, clothes, gasoline, cars, coffee, drain cleaner, banks, paper and baking soda are not only useful around the home, but by virtue of buying them you are having a positive effect on the environment. And of course, there are the books—at last count roughly nine major “how-to” manuals for the environmentally concerned, each with between 50 and 750 hints on how to

behave. Fortunately, there is some overlap, so you don't have to buy them all.

The problem is, of course, that the motive of ecology-as-commodity is to set minds at ease, to make planet-saving “simple, easy and convenient.” You and I genuinely want to help. Or more accurately, we want to live as we have while disentangling ourselves from our role as polluters—to have our environment and exploit it too. The bad news is that we can't have it both ways, and the myriad lists of green products and actions, no matter how assiduously observed, are not going to reverse the steady decline. It is not that no good will come of it. It's just that green consuming does little more than smooth the rough edges of a consumer production complex run wild.

It is our legislators and the multinational corporations who are primarily responsible for the mess, and their serious commitment to the environment at the national and international level would be far more useful than ours at the level of the local grocery store. The way we can do the right thing, then, is not necessarily to bicycle to work or recycle everything in sight, although we're all for that. Rather, it is to become educated, demand changes in politics and processes of production, and elect people to office who will do the right thing. □

NO DOUBT MANY OF YOU, ATTUNED TO THE notion that coated paper is ecologically incorrect, are wondering if *Greenpeace* has sold its principles down some polluted river. Not so. The cover of this magazine may well be, under the circumstances, the most environmentally benign high-quality paper on the market today.

The inside of this magazine is printed on bleached recycled paper, which leaves a lot to be desired. It contains roughly 50 percent recycled fiber, only 20 percent of which is “post-consumer” (mostly from used textbooks, computer forms and office wastes). The rest is manufacturing and printing waste. This is the best proportion available. The recycled fibers are de-inked with

sodium hypochlorite, which creates toxic byproducts. And worse yet, while the recycling process does not create any new dioxin pollution, the resulting paper contains traces of dioxin left over from previous chlorine bleaching and from virgin pulp that is added to strengthen the recycled fibers. The paper industry is one of the largest single sources of organochlorines and dioxin pollution in the world, a fact it tried to hide from the public for years (see “Whitewash,” *Greenpeace*, March/April 1989).

This issue's cover is printed on a Swedish paper that is bleached without chlorine, using an oxygen-based process. It is the safest, cleanest high-quality paper, in terms of pollution, in the world. Unfortunately, it is made from virgin pulp from Swedish tree farms, and in some areas it will not be accepted by recycling plants. We also have to bring it all the way from Sweden.

Nevertheless, to influence the market in North America, Greenpeace is beginning a campaign to ask that everyone with similar paper needs demand non-chlorine bleached paper from their supplier. The North American paper industry insists that high-quality paper can't be made without chlorine. This magazine proves them wrong.

Despite the unfortunate fact that recycled paper contains dioxin and other chlorinated toxins, it has a growing market in North America, which we continue to support. Now it is time to begin the next step. By introducing chlorine-free paper, we are moving toward the ultimate goal: the use of truly recycled and dioxin-free paper, which is de-inked and, when necessary for high quality, rebleached without chlorine. To receive the Greenpeace Guide to Paper, send \$3.00 to Greenpeace Paper Guide, 4649 Sunnyside Avenue N, Seattle, WA 98103, or 2623 West 4th Avenue, Vancouver, British Columbia, V6K 1P8, Canada. □

“Fresh green paint provides camouflage for polluters, confusing voters and consumers.”

“This issue's cover is the safest, cleanest high-quality paper in the world.”





COVER ILLUSTRATION: ANDRZEJ DUDZINSKI

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Now that being ecologically correct is the rage, corporations have discovered that money does indeed grow on trees. But doing the right thing is more complicated than the advertisements suggest. A guide for the perplexed.

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The automobile is going global, bringing with it pollution, waste and other costs that veteran car cultures such as the United States are just beginning to tackle. But how do we put on the brakes?

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### HOW TO READ THIS MAGAZINE

Publishing this magazine is a poor substitute for visiting everyone in the United States, Canada and Australia and explaining what counts in the age of environmental crisis. It is designed to anger, enlighten, enthuse, and make possible action at the individual level. Please take advantage of it, write the letters, use it as a resource to enlighten others, including your local newspaper and local organizations. If you want to reprint something, just ask. After you are finished, save it or pass it on to friends,

a doctor's office, school, retirement home, library, coffeehouse. As a last resort, recycle it. If your local recycler doesn't accept the clay-coated cover, tear it off.

The cover of this magazine is made of paper we import from Sweden. We use it to make a point: almost all paper in the United States, Canada, Australia is bleached with chlorine, creating dioxin-laden chlorinated pollution. This paper is bleached using an oxygen-based process, making it safer

and cleaner. Using it is a small but significant step toward our ultimate goal: the exclusive use of post-consumer recycled paper that, when necessary for high quality, is bleached using a non-polluting technology. The inside of this magazine is printed on recycled paper. If you want to know more, write us at Greenpeace Magazine, Paper Department, 1436 U Street, NW, Washington, DC 20009 USA.



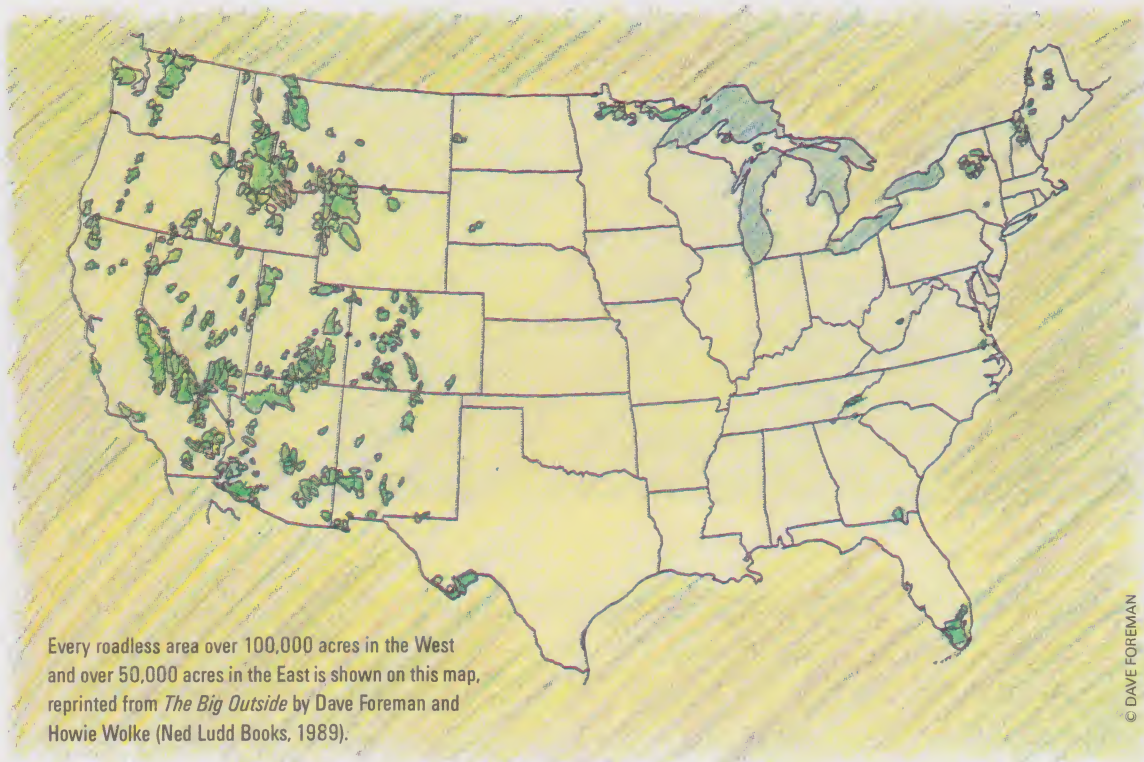
### THOUGHTS OF CHAIRMAN MAHONEY

"It is a question of perception versus reality, [says Monsanto's Chairman and CEO Richard Mahoney]. The reality, Mahoney says, is that the environment is in great shape, that the public overestimates the risk from pollution, and that Monsanto isn't putting people at risk with its products and processes.

"Mahoney admits that his ultimate goal of zero emissions is 'an impossibility.' What is he aiming at, then? 'Our overall goal,' he says, 'is zero effect on public perceptions.'...

"And sometimes the public is actually right, Mahoney admits. Sometimes even environmental groups are right.... Does Mahoney ever wish the public would just stop worrying about the environment and trust him to do the right thing? 'I don't think that's possible,' he sighs, 'in this day and age.'"

*Financial World, Special Issue: Business and the Environment, Jan. 23, 1990.*



Every roadless area over 100,000 acres in the West and over 50,000 acres in the East is shown on this map, reprinted from *The Big Outside* by Dave Foreman and Howie Wolke (Ned Ludd Books, 1989).

© DAVE FOREMAN

### EARTH DAZE

IT IS A MEASURE OF OUR AMBIVALENCE ABOUT Earth Day that this is being written before the big day; in fact a good six weeks in advance. But in the absence of some miraculous turn of events, the pageantry of April 22 is destined to follow a fairly predictable course.

Twenty years ago, Earth Day was actually subversive; a fringe demonstration complete with surgical masks, a rousing march on Washington and all the familiar trappings of protest. This time there will be no march on Washington because there will be no one to march *on*—everyone has joined the parade. That includes all the major polluters and all the politicians whose dereliction of duty has shattered the faith and soiled the backyards of many of the industrialized world's voters.

The true measure of Earth Day comes after it is over, and the record for following through on lavish public displays of social conscience is not reassuring. The decade that began with the MUSE anti-nuclear concerts and ended with the Amnesty Tour and Hands Across America passed comfortably in tandem with a distinctly reactionary administration in Washington, as well as some of the most egregious universally sanctioned public displays of conspicuous consumption in recent memory.

But history obscures as often as it enlightens. With education and action, we can ensure that this event is the first of many in a new decade that, in contrast to the last, combines protestations of commitment with real commitment to environmental protection.

### THE SEEING OF IT

WE ARE IN THE INFORMATION AGE, A development that according to various pundits spells either the end of individualism and civil rights or the beginning of a borderless, utopian info-democracy. Chances are it means neither. Human nature tends to blunt the extremes of a new technology, leaving us in an inconclusive middle that has both good and bad in it.

But the age of video has produced an indisputable good. Videotape technology now enables people around the world to create, view, copy and pass on tapes of events and phenomena that the customary visual media, for political and other reasons, has chosen to ignore or censor. The underground video network has blossomed into a potent political force.

Before the peaceful revolution in Poland, citizens packed church basements to watch videotapes produced by Solidarity. In Chile, producers of the monthly pro-democracy

"The first responsibility is information, is truth."  
—Adlai Stevenson.

### MITIGATION WE'D LIKE TO SEE

News Item: After issuing a prospectus that required several thousand pounds of paper, a British bank declared it would plant 12 acres of trees to mitigate the effects of the printing.

News Item: A Virginia energy firm has announced plans to



plant 52 million trees in Guatemala to mitigate the effects of carbon dioxide emissions from their power plant in Connecticut.

In the '90s, voluntary mitigation schemes may well prove the most popular method of appearing to settle accounts with the planet and the public while continuing with business as usual. Before the trend takes off, we'd like to establish some guidelines. We have compiled a few appropriate mitigation schemes, and we welcome yours:

**Action:** General Motors builds car manufacturing plants in Hungary, Czechoslovakia and East Germany.

**Mitigation:** GM tears up and landscapes 1,000 miles of freeway in Los Angeles.

**Action:** The World Bank funds the construction of the Narmada Dam in India.

**Mitigation:** A World Bank demolition team blows up the Glen Canyon Dam in Arizona.

**Action:** The Food Packaging Institute lobbies against packaging restrictions.

**Mitigation:** Institute officials crew for a year on the garbage barge.

video magazine *Tele Analysis* claim that 300 tapes distributed to their subscribers eventually reach 40,000-50,000 viewers after being duplicated and passed on from hand to hand. When Israel barred television journalists from entering the West Bank in 1987, news agencies turned their hand-held video cameras over to Palestinian amateurs, who returned with eyewitness accounts of the intifada. And in the U.S. Congress, a clandestine videotape of dolphins dying in the nets of tuna fishermen helped sway the vote on the reauthorization of the Marine Mammal Protection Act.

Greenpeace has its tapes too, productions that we are told have contributed to the quiet revolution against toxic waste taking place in small communities across the United States and Canada. "The Rush to Burn," a documentary about hazardous waste incineration, is being copied and distributed by dozens of community activists fighting incinerators. "We need those tapes," says Sue Greer, director of an activist group called People Against Hazardous Landfill Sites. "The grassroots movement depends on them." Community-building, education and empowerment are the unanticipated outgrowths of the video revolution. Let's use them.

**What You Can Do:** Write Karen Hirsch at Greenpeace, 1436 U Street NW, Box V, Washington DC 20009, for information on Greenpeace's videotapes and community-building study guide.

## THE MOUSE THAT ROARED II

"WE WILL NO LONGER ACCEPT SHIP VISITS ON a 'neither confirm nor deny' basis." With those words, National Party leader Jim Bolger effectively married New Zealand to the policy that has placed his country at the forefront of anti-nuclear sentiment since 1984. Enacted by David Lange's Labour government, the ban on nuclear-armed ship visits was predicted to fall with the ouster of his party in the upcoming election. But the wish of the voters appears to have prevailed; more than half the electorate wants to preserve the ban, even if it means the end of military alliances with the United States.

With the National Party's astounding reversal, New Zealand's proud policy, which provoked an embarrassing and overwrought flurry of diplomatic bullying from the Reagan administration, is now firmly entrenched. (We

await with interest David Lange's memoirs, in which he promises to detail the "quite extraordinary things" the Reagan administration did in response to the warship ban.)

Democracy's victory in New Zealand dovetails well with the stunning upset of the United States' nuclear aspirations in Belau. Dragged to the polls for the *seventh* time in five years, Belau's 8,000 voters firmly rejected once again the U.S. offer of \$500 million and assorted baubles in exchange for free military run of the former protectorate, preferring instead to preserve the dignity of the island nation's anti-nuclear constitution, the only one in the world. In the Pacific, the anti-nuclear sentiment once dismissed by the Pentagon as the "kiwi disease" appears healthy and vital.



"It's great! You just tell him how much pollution your company is responsible for and he tells you how many trees you have to plant to atone for it."

Ed Fisher. © 1989 The New Yorker Magazine. Reprinted by permission.



## FURTHER RISKS OF RADIATION

**S**ELLAFIELD, BRITAIN'S MUCH-MALIGNED nuclear reprocessing plant, is surrounded by an unexplained cluster of childhood leukemia—unexplained, that is, until the release of the Gardner Report in February. This study found a link between male workers' exposure to low levels of radiation and the subsequent appearance of leukemia in their children. The report has shocked the nuclear industry, particularly as it appeared right after a major U.S. National Academy of Sciences report concluding that nuclear radiation is three to four times as likely to cause fatal cancer as previously believed. Taken together, the two reports suggest that exposure standards in the nuclear industry have been far too lax.

The new study should lead to tighter worker safety standards across the whole range of nuclear businesses, including mining, commercial power plants, the military, waste disposal and cleanup operations. Most countries follow the lead of the International Commission on Radiological Protection (ICRP), which has been criticized for proposing too little too late. But a recent ICRP draft report proposes restrictions that are tighter than those in practice in North America and most of Europe. Environmentalists are calling for reviews of standards in Canadian uranium mines, British nuclear submarines, U.S. nuclear weapons production facilities and other potentially hazardous work environments.

Sellafield has a long and notorious record of cover-ups, unreported radioactive leaks and disregard for public concern in its 40-year tenure as one of the world's few commercial nuclear fuel reprocessing plants. Keeping to form, Sellafield's Director of Health and Safety Roger Berry responded to the Gardner Report by suggesting "If anyone is that worried, it may be that the proper advice is: don't have a family."

## THE PAPER STATES

**D**IOXIN IS A HIGHLY POISONOUS AND extremely durable molecule, rendering the debate over how much should be allowed into the environment essentially moot—even at tiny concentrations, the stuff will quickly pile up enough to hurt someone. The U.S. Environmental Protection Agency (EPA) has set-

tled somewhat arbitrarily on a level of .013 parts per quadrillion for pulp and paper mill effluent, but it left the actual limit up to state regulators. Studying what happens when the EPA issues a "recommendation" is an easy way to gauge where the paper business holds sway.

State regulators in Georgia are attempting to increase EPA's dioxin limit by a factor of more than 500. Alabama tried to avoid a fight with the powerful paper lobby by setting its dioxin limit 10 times looser than the EPA's, but the industry sued anyway, so the state backed off by another factor of 10. The EPA's paper effluent recommendations have also been gutted in Mississippi, Tennessee, the Carolinas, Oregon and Washington.

Even state health warnings depend on where you live. The Westvaco paper mill is on the Maryland rather than the West Virginia side of the Potomac River—that's why only West Virginia fishermen are warned that their fish might be contaminated with paper mill poisons.

## TESTING OUR PATIENCE

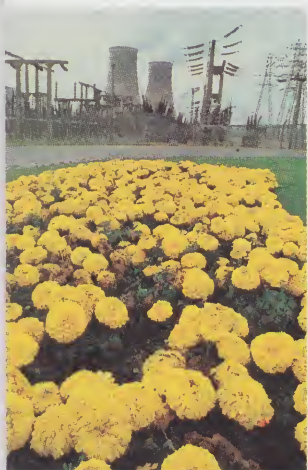
**T**HE '80S PASSED WITH THE UNITED STATES consistently ignoring the call for an end to nuclear testing. Hopes for a more reasonable approach from George Bush were dashed in January when the administration broke a long-standing promise to reopen negotiations for a Comprehensive Test Ban Treaty once two agreements on other aspects of nuclear testing had been signed.

Despite repeated appeals and an 18-month unilateral testing halt from the Soviet Union, the United States has thumbed its nose at worldwide demands for a test ban. At various times, the Pentagon has accused the Soviets of violating the agreed limits on explosive yields, insisted on elaborate verification schemes and imposed other time-consuming roadblocks. The stonewalling strategy is based on the theory that, in the words of former Deputy Assistant Secretary of Defense Frank Gaffney, "the more time wasted on discussions and experimentation of monitoring techniques... the easier it will be to stave off demands for a comprehensive test ban."

Forty-one nations have decided to circumvent the Pentagon by convening a special meeting of the signatories of the Limited Test

• **What You Can Do:** Urge Rep. Henry Nowak (D-NY), Chairman of the Subcommittee on Water Resources (Committee on Public Works and Transportation), to investigate ways to stop pulp and paper mills from using chlorine-based bleaches. Write to Rep. Nowak, Rm B376, Rayburn HOB, Washington, DC 20515.

37,000 North Americans participated in civil disobedience to end the arms race in 1989; 5,500 were arrested (*The Nuclear Resister*).



© DE KEERLE/GAMMA-LIAISON

▲  
Sellafield: No Dads allowed.

A preliminary study of the health effects of the 25 toxic chemicals most frequently found in North American ground-water would require, using "a very conservative estimate," 33,554,432 13-week experiments at a cost of more than \$3 trillion (U.S. EPA's National Toxicology Program).

If all electric lighting in the United States were replaced with state-of-the-art, energy-efficient hardware tomorrow, electricity savings in the first year would come to \$32 billion (Rocky Mountain Institute).



Ban Treaty during which they will vote to amend the treaty so that it bans all nuclear tests. The United States has pledged to veto such a move, which is their right under the treaty, but doing so would exact a heavy political cost.

More than 60 U.S. representatives have signed a letter demanding that the Secretary of State reconsider the Bush administration's latest stalling tactic. Both France and the United Kingdom have indicated that they would stop testing if the United States did, putting the Bush administration squarely in the way of a permanent end to nuclear testing on earth. China, which is not party to any testing agreements, appears to have put its program on hold, with only two tests conducted in the last three years.

### SAVE THE REDWOODS

THE 3000-ACRE HEADWATERS FOREST IN Humboldt County, California, is the largest single privately held stand of giant redwoods left in the world. It is owned by the Maxxam Group, which is headed by the notorious Charles Hurwitz. He has been clearing the forests as fast as is politically and technologically possible to pay off debts incurred in Maxxam's Gordon Gecko-style takeover of Pacific Lumber in 1985 (financed by none other than the bankrupt and disgraced Drexel Burnham Lambert).

In March county politicians made a deal with Hurwitz in which he promised not to cut the grove for two years. Two weeks later,

local activists discovered that the company had plowed a mile-long road along the ridge between the watershed's two main creeks, breaking the agreement as well as a legal injunction against logging in the grove. No one trusts Hurwitz, and with good reason: according to the local activists, such double-crosses have been standard company practice in three years of bitter fighting over the last remaining shreds of the region's majestic forests.

A Sacramento-based coalition of organizations called Forests Forever wants to save the Headwaters and other California forests. They need 600,000 signatures by May 18 to get the statewide Ancient Forest and Wildlife Protection Initiative on the November ballot.

### THE POPE, THE TELESCOPE AND THE RED SQUIRREL



© MILES/AZ GAME & FISH SVC

THE FACT THAT 10,720-foot Mount Graham rises precipitously out of the dry Arizona terrain makes it biologically unique—a "sky-island"

ecosystem that is the home of one of the last remaining stands of Engelmann Spruce, several unique animal and insect species and the endangered Mt. Graham Red Squirrel.

Its geology has also attracted an unusual coalition of telescope builders. The University of Arizona, West Germany's Max Planck Institute, the Smithsonian and the Vatican (whose Jesuit observatories in Rome and Castel Gondolfo, Italy, are smogged in) are eager to construct three major observatories atop the mountain at a cost of \$200 million. With the help of Arizona's congressional delegation and the Washington law firm of Patton, Boggs and Blow, this cabal has managed to persuade the U.S. Congress to exempt the plan from the Endangered Species Act and the National Environmental Policy Act.

The coalition favors the site because it is convenient to the university campus and is not yet plagued by "light pollution." Aside from trashing a pristine and biologically unique mountain and threatening the last 150-odd Mt. Graham Red Squirrels, building this observatory depends on undercutting the nation's leading environmental laws. Clearly not worth it.

"The most sickening display of corporate aggressiveness in Wisconsin history."

State Senator Russell D. Feingold on the successful effort of Monsanto, Eli Lilly, American Cyanamid and Upjohn to defeat legislation that would have informed customers of hormone additives in milk.



© DWIGHT METZGER

▲ The Smithsonian's unpopular exhibit.

➤ **What You Can Do:** Protest to Arizona Senators John McCain and Dennis DeConcini, Washington DC 20510, and your legislators in the U.S. House of Representatives, Washington DC 20515. Ask them to request that the General Accounting Office review this evasion of U.S. law.

Urgent: Save these trees!



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CFC-FREE FOR OVER 1

Johnson's Wax has always shared the quest for a  
environment. Through product development  
to work the environmental side of the equation.  
And, thirty years ago, we were the first  
manufacturers of household products to  
eliminate our aerosol products.  
We are proud to sponsor the President's  
Council on the Environment and have  
and seen in the Johnson's Wax and  
about how Johnson's Wax are helping  
our environment.

# A BILL OF GOODS?

## GREEN CONSUMING IN PERSPECTIVE

**T**HE AD OPENS WITH A TABLEAU OF CHILDREN LAUGHING and skipping as they carry green garbage bags across a verdant meadow strewn with litter. As they stuff the trash in bags, a voice-over speaks of the virtues of a clean environment and biodegradable garbage bags. With the field nearly cleaned, a spectral Native American in ceremonial regalia appears, intoning to one awed youngster, "Take what you need, but always leave the land as you found it."

In another commercial, a butterfly flits across the screen, and a pleasant voice patiently details the magnanimity of Chevron, the multinational oil giant, which has

set aside land near one of its refineries to ensure that the rapidly dwindling El Segundo Blue butterfly does not fade into extinction. Who performs such acts of selfless altruism, the viewer is asked? "People Do," responds the oil company.

This is the new environmental advertising, the big-business response to the ecological mood of the public. We'll be seeing a lot more of it in the '90s. The environment, for better or worse (mostly better), is now an "issue." The Michael Peters Group, a design and new products consulting firm, found in a 1989 market research poll that 89



...their first geogra-  
planet ... recycled materials.

## BIODEGRADABLE DIAPERS



## HOW TO BUY RIGHT:

First, ask yourself if you really need this product, regardless of whether or not it calls itself "environmentally friendly." This should eliminate bleach, fabric softener, drain cleaner, air freshener, everything in aerosol cans, disposable cameras, electric can openers and hundreds of other cleaners, appliances, and plastic trinkets that some ad copywriter is convinced you couldn't do without.

Buy the product with the least packaging, and write letters to companies that insist on wrapping everything in layers of plastic and paper.

Inform yourself, using the dozens of resources available in this magazine and elsewhere, about boycott targets, non-toxic alternatives, how to make it at home or do without it.

Elect people to office who will do the right thing—people who are willing to address problems created by the packaging industry, the oil companies, the chemical manufacturers and the investment community.



BY DEBRA LYNN DADD AND ANDRE CAROTHERS

percent of Americans are concerned about the impact on the environment of the products they purchase, more than half say they decline to buy certain products out of concern for the environment, and 78 percent would pay more for a product packaged with recyclable or biodegradable materials.

Environmental concern "is a bigger market than some of the hottest markets of the '80s," says the journal *American Demographics*. "This is not a small market niche of people who believe in 'the Greening of America,'" says Ray Goldberg of the Harvard Business School. "It is becoming a

major segment of the consuming public." Little wonder, then, that Madison Avenue has turned caring for the environment into a marketing strategy. "The selling of the environment," says Minnesota Attorney General Hubert Humphrey III, "may make the cholesterol craze look like a Sunday school picnic."

In the case of these two TV ads, the sell is all hype. The first, for Glad "biodegradable" garbage bags, fails to mention that truly biodegradable plastic is as rare as the El Segundo Blue. Even if it were available, the pollution released in plastic production puts the Glad Bag's ecologi-



cal balance sheet squarely in the red. And Chevron is first and foremost an oil company, an industry that is directly and indirectly responsible for much of the pollution on earth. Back-of-the-envelope calculations suggest that Chevron has probably spent five times as much to boast in magazines and on television of its skimpy list of environmental initiatives than the actions actually cost. (And many of them were required under the provisions of their permits anyway.)

Navigating the misleading claims of opportunistic advertisers is just one of the difficulties facing the consumer intent on "ecologically correct" shopping. So complicated is the terrain, in fact, that what is becoming known as "green consuming" may prove to be nothing more than a costly diversion from the campaign to save the earth.

**T**HE RUSH TO FILL THE STORES OF EUROPE AND NORTH America with consumer goods is just one of several leading causes of environmental destruction. The influence of big business has foiled the effort to rein in the consumer culture's worst side effects. One method is to inform consumers of the implications of their purchases, a tradition that inspires consumer rights groups all over the world. Informative labeling is now the method of choice for environmentalists and manufacturers.

The first labeling scheme keyed for ecological concerns was West Germany's Blue Angel program, begun in 1978. The Blue Angel symbol graces over 2,000 products, calling consumer's attention to benefits such as recycled paper and the absence of toxic solvents. Similar schemes are being proposed in nearly every country in Western Europe and now in the United States. They come in three versions: independent, non-governmental efforts, like the United States' new Green Seal program (managed by the Alliance for Social Responsibility in New York); quasi-governmental schemes like those being developed in the United Kingdom and Canada; and identification programs from the manufacturers themselves, like Wal-Mart's new line of "green" products.

Industry's fear of the consumer has produced some notable successes. Before Friends of the Earth in the United Kingdom had launched a planned boycott of CFC-containing aerosols, the industry pledged to phase them out. The Blue Angel program can lay claim to preventing 40,000 tons of solvents from entering the waste stream through glossy paints. The concern over agrochemicals in food has given a much-needed boost to the organic food industry, and the boycott of tuna, in conjunction with a federal labeling requirement that may pass the U.S. Congress this year, will play a large role in saving dolphins from the fishing fleet's nets.

But green consuming has its limits. First, seals of approval may be awarded indiscriminately and for the wrong reasons. The Blue Angel, for example, is bestowed on one brand of gasoline-powered lawn mower because it is quieter than a rival. The push variety, soundless and emission-free, gets no award. Loblaw's, a Canadian chain of grocery stores, has among its self-proclaimed "green" products a brand of acid-free coffee, so labeled because it does not cause stomach upsets. "Green" batteries are being marketed in the United Kingdom and Canada that contain mercury—considerably less than other brands, but enough to put the lie to claims of environmental friendliness.

Some claims are absurd. "Biodegradable" diapers are filling the developed world's landfills, with no sign that they will ever disappear. West German manufacturer AEG launched a \$2 million ad campaign in England claiming that their dishwashers saved newts. The logic runs like this: since the AEG appliances are slightly more energy efficient, they use less electricity and are therefore responsible for less acid-rain-causing power plant emissions (which, we assume, kill newts). Arco has launched a "clean" gasoline in California with the slogan "Let's drive away smog." Both Volkswagen and Audi have touted their cars' low emissions, including "harmless carbon dioxide." If they had done a little homework they would have discovered that carbon dioxide is a leading greenhouse gas.

The environmental advertising bandwagon offers companies an opportunity to spruce up their images at relatively low cost. Many of the recycled paper products now flooding the market are made by companies with otherwise reprehensible environmental records. In the United Kingdom, according to the company's slogan, "Green means Heinz," but in the Pacific, thanks to tuna fishing, it means dead dolphins. And the term "biodegradable" has been attached to so many different brands of polluting petroleum-based plastics that it has become virtually meaningless, as well as highly misleading (see sidebar).

These companies rely on government regulations for some of their claims, leading to situations like McDonald's declaration that their styrofoam burger trays are CFC-free, when in fact they contain CFC-22, a less potent member of the same chemical family. The lie is based on a glaring example of regulatory sleight of hand: according to the U.S. Environmental Protection Agency, CFC-22 is "technically not a CFC," although for the ozone layer the distinction is far less clear. Under federal law, paper manufacturers can call paper "recycled" when it includes 40 percent recycled content, and that portion consists mostly of paper left over from production processes, not paper that has already been through a consumer's hands and recycled. In Canada, where the Canadian Standards Association creates guidelines for green products, business does its best to ensure that stand-



#### A FIELD GUIDE TO THE ENVIRONMENTALLY BENIGN PRODUCT

(An extremely rare beast. If sighted, purchase immediately.)

It is not obnoxiously frivolous, like the new electric pepper mill.

It releases no persistent toxins into the environment during production, use or disposal.

It is made from recycled material or renewable resources extracted in a way that does not damage the environment.

It is durable and reusable first, or recyclable or truly biodegradable next.

It is responsibly and minimally packaged.

It includes information on manufacturing, such as location, labor practices, animal testing, and the manufacturer's other business.



## ► GREENPEACE REPORT: THE DEGRADABLE PLASTICS SCAM

"[Degradable bags] are not the answer to landfill crowding or littering.... Degradability is just a marketing tool.... We're talking out of both sides of our mouths when we want to sell bags. I don't think the average customer knows what degradability means. Customers don't care if it solves the solid-waste problem..It makes them feel good."

—Spokesperson for Mobil Chemical Company, manufacturer of Hefty degradable trash bags.

You are being duped. Most of the products hailed as biodegradable in the marketplace today are little better than their "non-biodegradable" counterparts. Biodegradability means one thing: the material is capable of being broken down by natural processes into pieces small enough to be consumed by microorganisms in the soil. Plastics, as petrochemical products, are not the outcome of biological evolution, so living things lack the enzymes that can break them down to a molecular level where they can be taken and reincorporated into living things.

So what do these materials do?

According to a study commissioned by Greenpeace and conducted by the Center for the Biology of Natural Systems, "biodegradable" plastics can be divided into two categories: those to which starch molecules have been added; and those that have been altered so that they are sensitive to light and can at some point break into small pieces.

No one has proven that either method breaks down the plastic to the point where it can be metabolized by microorganisms. But this has not discouraged manufacturers from making false claims about their "environmental friendliness."

The Greenpeace report, *Breaking Down the Degradable Plastics Scam*, analyzed the claims of additive suppliers and plastics manufacturers such as Du Pont, Ecoplastics and Archer Daniels Midland. It determined that none of these major manufacturers could support claims that their products were "biodegradable." The only truly biodegradable plastics are those made from natural polymers such as ICI's PHBV, which is produced by bacteria, and cellophane, which is made of cellulose produced by plants. These products are not in general commercial use because they are currently too expensive or have been replaced by mass-produced plastics. Cellophane has the additional drawback of releasing toxins during manufacture.

Two other concerns stem from these claims of biodegradability. First of all, more than 1,000 additives and colorants, such as cadmium, are used to modify plastics, and these may prove toxic in the environment. The tests for toxicity performed by these companies are inadequate to support their claims of safety, according to the Greenpeace report. And secondly, the role of "biodegradability" in solving the garbage crisis is highly questionable. Reducing and eliminating packaging entirely, rather than tinkering with the contents of the waste stream, is the best solution to the problem.

**We Care About Our Environment**

THIS "BAG" WILL BEGIN DEGRADING WITHIN 15 DAYS OF EXPOSURE TO ULTRAVIOLET LIGHT.... AND WILL CONTINUE THE PROCESS UNTIL IT TURNS INTO A NON-TOXIC ENVIRONMENTALLY SAFE DUST IN 60 TO 90 DAYS.



ards are not too stringent. "We make the draft of a guideline," says one insider, "and the industry fights to lower the standard."

All this should raise doubts about industry's claims that they have seen the light, and that hiding behind the advertising pitch is a real concern for the environment that transcends the bottom line. In fact, the record shows that big business is not inclined toward public service. According to a study by Amitai Etzioni of the Harvard Business School, two-thirds of the Fortune 500 companies have been charged with serious crimes, from price-fixing to illegal dumping of hazardous wastes. And these are only the ones that have been caught.

But even if we could count on the good faith of all concerned, the role of green consuming in the fight to save the planet is destined to remain small and marginal. Consumption's role in destroying the environment is a complex and poorly understood phenomenon. A truly green economy, for example, would require that all products be audited for their effects. Such an audit would analyze the product from "cradle to grave," and include the amount of energy used to produce and transport the item, the pollution generated in its manufacture, the role of the commodity in the economic and social health of the country of origin, the investment plans of the company in question and all its subsidiaries, and the final disposal of the product.

The questions raised by this approach are endless. Does the use of rainforest nuts justify the energy expended transporting them here? Are the labor practices in processing these nuts fair? We all thought the right thing to do was to use paper bags, but if energy use is factored in, some studies show that plastic grocery bags are more environmentally benign (bringing a bag from home doesn't make money for anyone, so you won't see that solution advertised). Should we buy recycled paper from a company known to pollute rivers with pulp mill effluent? Should magazines be printed on chlorine-bleached paper contaminated with dioxin, even if it is recycled and recyclable? Or should they use dioxin-free paper from Europe, even though it is at the moment rarely recycled, and fossil fuels are used to transport it?

Moreover, much of the pollution generated by business is out of reach of the average consumer. For example, as Barry Commoner points out, one of the reasons we have air pollution is that much of the work done by railways has been taken over by trucks, which generate four times as much pollution for each ton hauled. How

would the average store owner respond if we demanded only goods that had been delivered by train? And when the beer industry consolidated and discovered that it was cheaper to sell beer in throwaway bottles than in returnables, what possible role could the consumer have played? Between 1959 and 1970, the number of beer bottles produced increased five-fold, while consumption only went up by one-third. Detroit pushes big cars with high-compression, high-pollution engines on the American public not because "that's what we demand," but because that's where the biggest profits are. These decisions aren't illegal, they are simply part of "doing business" in the usual way—a way that puts environmental considerations last.

Finally, individual action, when limited to the supermarket aisles, does little to forward the fundamental changes required to save the earth. Not only is this collection of individual actions completely outdistanced by the pace of

destruction throughout the world, but as Friends of the Earth in the United Kingdom points out, green consuming "leaves totally unanswered the basic questions about global equality and the chronic poverty and suffering of the millions of people in the Third World. ...There is a real danger that green consumerism will divert attention from the real need to change institutional structures." Green consum-

ing labeling schemes, they conclude, "must complement, not become a substitute for firm government action."

Green consuming is still consuming, which is the fundamental paradox. The answer to the problem we face is not only to consume appropriately; it is primarily to consume less. Green labeling schemes are similar in philosophy to the end-of-pipeline pollution control strategies that have failed to stem pollution. They put a dent in the pollution problem, but they do not solve it. The key to protecting the planet is to prevent a problem at the source, rather than tinkering with it after it is already created. In the consumer society, this means intervening early in the game in the decisions about what is produced and how it is produced. A society in which consumption is conscious and restrained requires that new and different decisions be made in corporate boardrooms as well as in national capitals, decisions that put the needs of the planet ahead of the profits of the corporation. □

*Debra Lynn Dadd is editor of The Earthwise Consumer and author of the forthcoming book, Nontoxic and Natural and Earthwise (Tarcher). Andre Carothers is editor of Greenpeace magazine.*

## RESOURCES:

### Newsletters:

*The Earthwise Consumer* (8/year, US: \$20; Canada: \$26; Australia: \$32) P.O. Box 1506, Mill Valley, CA 94942

### Catalyst

(4/year, US: \$25; Canada: \$30; Australia: \$32) 64 Main Street, Montpelier, VT 05602

### National Boycott News

(4/year, US: \$10; Canada and Australia: \$20) 6506 28th Avenue, NE, Seattle, WA 98115

### One Person's Impact

(6/year, US, Canada and Australia: \$24) P.O. Box 751, Westborough, MA 01581

### Co-op America

(4/year, plus catalog, US only: \$20) 2100 M Street, Suite 310, Washington, DC 20063

### Pamphlets:

#### *Stepping Lightly on the Earth*

Greenpeace Action, Dept. SL, 1436 U Street, NW, Washington DC 20009 (Send a self-addressed stamped envelope.)

#### *Shopping for a Better World*

(US, Canada and Australia: \$5.95) Council on Economic Priorities, 30 Irving Place, New York, NY 10003

### Books:

#### *Making Peace with the Planet*

by Barry Commoner (US: Pantheon Books, \$19.95)

#### *Save our Planet: 750 Everyday Ways You Can Help Clean up the Earth*

by Dianne MacEachern (Dell, US: \$7.95; Canada: \$12.95)

#### *The Green Consumer Guide*

by John Elkington, Julia Hailles and Joel Mackower (US: Penguin, \$8.95; Canada: McClelland & Stewart, \$14.95)

#### *Saving the Earth: A Citizen's Guide for Environmental Action*

by Will Steger and Jon Bowermaster (US: Knopf, \$19.95)

#### *The Green Lifestyle Handbook*

edited by Jeremy Rifkin (US: Henry Holt, \$7.95; Canada: Fitzgerald & Whiteside, \$10.95)

#### *Nontoxic and Natural*

and *The Nontoxic Home* both by Debra Lynn Dadd, P.O. Box 1506-G, Mill Valley, CA 94942 (US: \$11.95 postpaid)



A photograph of a car assembly line, likely from the mid-20th century. Several cars are lined up on the assembly line, with workers in white shirts and dark trousers standing around them. The cars are in various stages of completion. The background shows more cars and workers, creating a sense of a busy factory environment. The lighting is somewhat dim, typical of an indoor industrial setting.

# CAR SICK

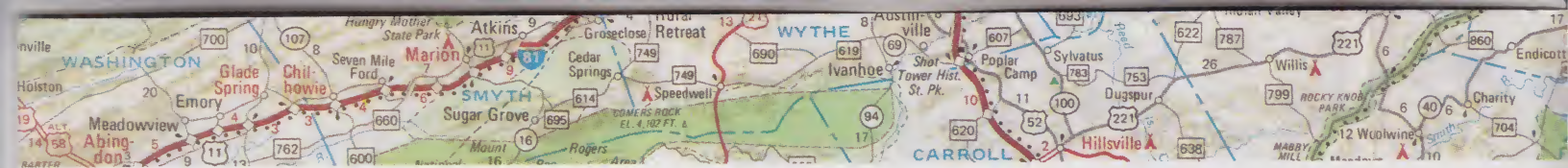
## Automobiles Ad Nauseam

BY ROBERT SCHAEFFER

When the Berlin Wall was breached, West Germans welcomed East Germans with open arms. But they were less enthusiastic about the smoky Trabants that carried East Germans west, clogging roads and creating perhaps the world's first politically motivated traffic jam.

Most Americans have never heard of the East German Trabant or its compatriot, the Wartburg, or of cars like the Zaz Zaporozhetz (U.S.S.R.), Skoda (Czechoslovakia), Dacia (Romania), Jaefang (China), Maruti Udyog (India) or Sevel (Argentina). Nor are they likely to see them in an auto-dealer showroom any time soon. But cars like these are being bought in growing numbers as consumers in Eastern Europe, Asia and Latin America rush to buy cars. Rising consumer demand is creating an explosion in the world's car population.





In 1950, there were 50 million cars worldwide, 75 percent of them in the United States. This number doubled by 1960, redoubled by 1970 and redoubled again by 1990, an eightfold increase to 400 million cars. U.S. drivers now own only one-third of the world's total, but one-half of all Americans have put two cars in their garage. In Europe, car ownership is growing faster than the population, with eager car-boomers in Eastern Europe ready to swell the car population there. The stream of Trabants heading west will seem a trickle compared to the flood of Fiats and Escorts that will head East just as soon as Western and Japanese auto makers gear up to produce for swelling markets there.

"India and China account for 38 percent of the world's population, but own scarcely one-half of one percent of its automobiles."

—Worldwatch Institute

power far exceeds their number. In desperately poor Haiti, for instance, where only one of every 200 people owns a car, the autocracy is able to get the government to spend one-quarter of its import budget on the purchase of oil for motorists.

There are two problems with the world's car population explosion. First, it is obvious that the earth is ill equipped to handle the increasing quantity of air-pollution gases emitted by cars, gases that deplete the ozone, warm the planet, acidify its waters and ruin human health (the American Lung Association attributes 30,000 deaths annually to air pollution). And second, the earth is plainly incapable, in the not-too-distant future, of providing fossil



▲ Low interest rates, suburbs and cars go hand in hand.

Wistful economists used to say that if only every Chinese would buy a pair of shoes, the rest of the world would work and profit. Today, they dream of 100 million new potential customers in Eastern Europe or the 120 million middle-class Indians now able to afford inexpensive compact cars like the Maruti Udyog. The potential for growth is enormous, especially in countries like the Soviet Union, where there is one car for every 24 people, or India, where the ratio is 1 to 515. Analysts expect the European car fleet to double in the next 20 years and more than double in Asia and Latin America. If only 10 percent of this new market bought U.S. cars, the Big Three could double their annual production and put Detroit back on the map.

The world's new car owners will create a powerful political and economic force, what can only be called an "autocracy," which will be able to command its country's resources for road construction and oil imports. And their

fuels to run this growing, gargantuan, gas-guzzling fleet. Whatever else can be said of socialist bloc failures, they can't be blamed for the impending car-population crisis. As car critic Ralph Nader said, "The Soviet Union's greatest contribution to world peace was the fact that it did not put a car in every Soviet citizen's garage."

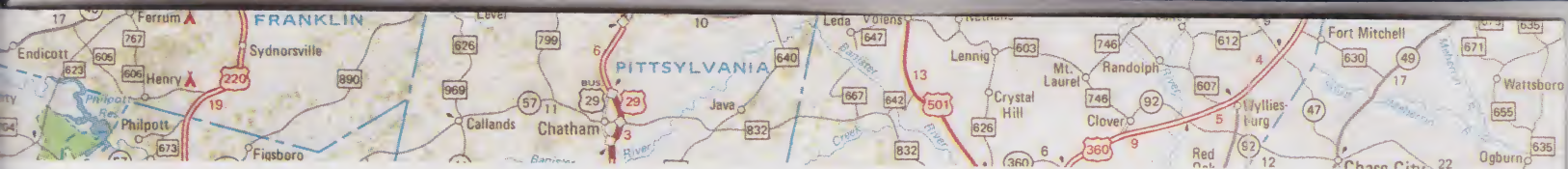
**O**UR CHILDREN'S CHILDREN WILL LIVE IN A WORLD without oil. The world's growing car population will make sure of that.

Cars are getting better mileage, but there are more of them. World oil consumption continues to rise, topping 225 billion gallons this year, an eightfold increase since 1950. At current levels of consumption, optimistic oil industry analysts expect oil to last another 45 years. But if consumption increases, as seems likely, this forecast will have to be shortened.

Profligate oil consumption creates both economic and environmental problems. In the economic ledger, the

Because even clean burning cars produce 20 pounds of carbon dioxide for every gallon of gas they burn, they are the biggest single source of greenhouse gases, which threaten to raise temperatures worldwide.





purchase of \$32 billion worth of oil in 1988 for use in the United States contributed more than one-third of the trade deficit. The United States now obtains nearly one-half of its oil from foreign sources. This share is expected to increase as the nation taps remaining domestic supplies and exploits marginal sources.

The growing demand for oil has sent the industry scurrying to develop supplies on marginal lands, in dangerous seas and sensitive offshore areas, resulting in spills around the world from Alaska to Antarctica. But errant oil tankers are not the only ones to blame for environmental problems. In the United States, do-it-yourself mechanics dump an *Exxon Valdez*-worth of used motor oil down drains and sewers every two and one-half weeks. And drivers in Los Angeles use one of every four gallons simply idling their cars on traffic-bound roads. The amount they send up in smoke is 80 times greater than the amount spilled from the *Exxon Valdez*. This waste will only get worse as congestion clogs roadways and driving speeds slow. Analysts predict that average speeds in Los Angeles will drop from 33 mph today to 15 mph by the year 2000.

Car-related resource waste doesn't end there. Consumers have discarded or buried 650 million cars in the United States since 1900. And billions of discarded tires have piled up in dumps across the country, threatening long-burning fires (see "Toxic Tire Fire" in *Campaigns*), which release toxic gases into the atmosphere and oil into the groundwater.

**W**E'VE ALL HAD THIS EXPERIENCE. YOU'RE TOOLING down the interstate, minding your own business, when a passing 18-wheeler blows your doors off. As it swings into the lane ahead of you, mud guards flapping, a sign on the back tells you, "This vehicle paid \$10,000 in road use taxes last year," like it owns the road.

Motorists frequently act like they own the road, presumably because they pay for it. But the taxes they pay at pump, tollbooth and weigh station don't begin to pay their way. The fees paid by a five-axle, 80,000 lb. truck, which does as much road damage at 9,600 automobiles, covers only a fraction of the cost of building or maintaining the road it uses.

Like truckers, the autocracy maintains a double standard. Drivers complain that the modest subsidies given to mass transit violate free-market principles, but remain silent or ignorant of the massive public subsidies given to support cheap, private motor use.

Oddly enough, the federal government's commitment to car subsidies began after World War II when it adopted a low-interest-rate policy to make housing affordable for working people. To meet the demand for

Americans collectively drive nearly as much as the rest of the world combined. Not only are they the biggest travelers on the planet, they travel interplanetary distances. In 1990 the U.S. auto and truck fleet will travel two trillion miles, the distance to the planet Pluto and back, 364 times.

The automobile may be the most destructive machine ever invented, more deadly, in historical terms, than the atomic bomb. Every year cars worldwide kill 300,000 people, nearly twice as many people as were killed in the atomic bomb attacks on Hiroshima and Nagasaki, and injure 10 million more.

In the United States, cars claimed their first million deaths in 1952, their second million in 1975. A third million will likely perish by the mid-1990s. To put this toll in perspective, nearly twice as many Americans have died on the highway than on the battlefield in all of this country's wars since 1776.

housing created by government largesse, developers like Levittown founder William Levitt built small tract houses on cheap land, which they found outside the city in rural areas. Because new "suburban" developments lay beyond existing public transportation networks (which in part was why the land was cheap), new homeowners needed cars to get to and from work. Detroit obliged by selling them the durable dream cars of the 1950s on the installment plan. The spread of home and car ownership created a powerful new constituency—the middle class autocracy—which was then able to demand further subsidies for the 3 million miles of paved roadway (roads and parking lots consume 10 percent of our arable land) and the 40,000-mile interstate highway system, which has cost billions more to build and maintain than has been collected from gas taxes and user fees.

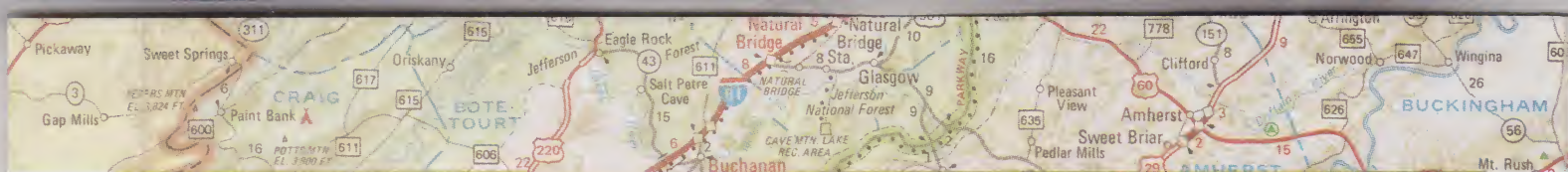
Subsidized interest rates and roads laid the groundwork for a whole network of subsequent subsidies, ranging from the monumental—the \$50 billion a year spent by the defense department to protect U.S.-flagged Kuwaiti oil tankers so they can keep oil supplies flowing through the Persian Gulf to the United States at relatively low prices—to the mundane tax deductions for work-related auto use and for employer-provided parking, which the Internal Revenue Service does not count as income, a generosity it does not extend to employer-supported public transit use. Together auto subsidies amount to more than \$300 billion a year, or \$2,400 for every passenger car, according to Stanley Hart of the Sierra Club. If gas taxes were to pay the entire cost, motorists would have to fork over \$4.50 a gallon at the pump.

Meanwhile, the growth of a subsidy-fattened autocracy has helped block support for mass transit. Before the government's car subsidy program began in earnest in the '50s, the country's public transit system carried 17 billion riders. Since then, the number of riders has been cut in half, to only as many people today as in 1900.

Despite extremely modest subsidies for public transit (\$1.9 billion annually) and Amtrak (\$605 million), the Bush administration's 1991 budget proposes cutting mass transit funds by nearly 20 percent and eliminating public funding for Amtrak.

Much the same is happening in Canada, where the government will cut railroad subsidies from \$561 million to \$350 million by 1992 and the number of passenger trains from 405 to 191 per week. And in Europe, where many countries boast of an extensive and efficient railway system, minor routes are being closed and service degraded. As Worldwatch car expert Michael Renner says, "Once people start thinking, 'I can't rely on the railroads any more,' then the car culture really takes root."





© UNIPHOTO

**W**E RELY FAR TOO MUCH ON THE CAR. WHEN THE growing world car population consumes the resources that fuel it, then we will learn just how much we depend on it. The coming crisis will bring an end to the auto age. The issue, for the world, is not *whether* it will end, but when, and how, and at what cost? The rapid, absolute growth of the world's car population will foreclose its future sooner or later, one way or another. From the environmental perspective, better that it end sooner, if for no other reason than human inhabitation cannot tolerate a dramatic increase in the Earth's temperatures as a result of the Greenhouse effect.

Greenpeace recently commissioned a study by a group of prominent British scientists to examine the measures that would be necessary to stabilize the "effective carbon dioxide concentration" of the atmosphere over the next 30 years (see *Campaigns*).

Their answer is sobering. Besides eliminating chlorofluorocarbon production by 1995 and halting net deforestation by the year 2000, carbon dioxide emissions would have to be cut to 30 percent of their present level by the year 2020. Assuming that the world's population will continue to grow, and that the industrialized world is most responsible for the production of carbon dioxide, they calculate that per capita emissions could be no more than .24 metric tons a year. According to my back-of-the-envelope calculations, this means that car users would be allowed 13.7 gallons of gasoline a year. That's only enough to drive a car that gets 30 mpg about 400 miles, the distance from Washington to Boston or San Francisco to Los Angeles. That's it.

Of course, this is a benchmark figure, a rough indication of what it would take to stabilize the Greenhouse effect. No one expects the world's autocracy to voluntarily

▲ President Bush plans to cut mass-transit funding by 20 percent.

Cars have even been enlisted to serve Cold War ideology. As *Washington Post* auto apologist Brock Yates has argued, "We live in a dirty, crazed, unruly society. And...some of that madness can be traced to the machine in the driveway. It maims people and kills them. It fouls the air and clogs the streets. But love it or hate it...the auto...has been our great emancipator, and it is not coincidental that the ownership of such a device is discouraged in totalitarian societies. A mobile population is a population essentially out of control of centralized government."

queue up for a gas ration this measly. No, the auto age will likely meet its end some other way.

Left to itself, the market will curb car ownership and use. Rising car ownership will increase oil consumption, which will raise oil prices, which will shrink the number of people who can afford to own and drive a car.

While many people are fully prepared to let market forces dictate the car's future, serious social and environmental problems will likely result. Note that 78,000 jobs are lost in the United States for every \$1 increase in the price of oil. Rising oil prices may force cars off the road, but the market will not, by itself, provide taxes to fund alternative transport for the unbuckled autocracy. Remember that public transit systems require huge investments (read: subsidies) and take years to build. Optimistic free-marketeers see alternative fuels as the solution: as gas runs out, motorists will simply convert to cleaner-burning methanol or natural gas. Trouble is, their combustion produces carbon dioxide and other toxic pollutants (methanol emits formaldehyde and, if produced from coal, emits twice as much carbon dioxide as oil), and ethanol's widespread adoption might increase competition for food-producing cropland at a time when world population is rising.

If market forces have their way, the auto age will end much as it began, with car ownership restricted to the very rich. Recall that after Mercedes-Benz founder Karl Benz invented the first car powered by internal combustion in 1885, only the wealthy could afford to buy it. It took 20 years before Henry Ford found a way to make lots of cars on the cheap, and it took another 40 years before Americans could afford to put a car in every garage. As unfettered market forces reverse the process, pushing poorer drivers off the road first, it is likely that transportation in America will increasingly resemble that in Mexico or Zaire, where





rich motorists drive their Mercedes-Benzes past the unfortunate majority who crowd onto decrepit buses and trains.

Government regulators and environmental advocates are not entirely willing to cede the transportation future to the market. Generally speaking, they advocate government regulations that would tighten auto emission standards to clear the air and impose an oil tax, both to discourage car use and to raise money to pay for public transit. Because cleaner cars will cost the industry between \$20 and \$90 billion, costs that consumers can expect will be passed along to them, rising emission standards will increase the cost of car ownership. In addition, some environmentalists urge increasing the cost of parking and tolls and raising new car taxes to restrict ownership. Taken together, the strategy is to use government regulation to reduce air pollution and increase car costs across the board. But as with the free-market approach, this program has serious problems.

More stringent emission standards will help clean up the air, but only for a time. As it is, much of the car's toxic pollutants have been removed from new cars. Any future gains will be undermined by the increasing size of the car fleet. "All the progress we are making through [clean air] technology is being eaten up by growth," says James Bond, executive officer of the California Air Resources Board.

And the trouble with raising the cost of car ownership across the board is that it is inefficient and unfair. In the United States and around the world, car ownership and use increases sharply with income. A household in the top 10 percent of the population owns three to four times as many cars, uses three times as much gas and drives them three times as far as a car-owning household in the bottom 10 percent. A general increase in car costs forces poorer drivers off the road first, since they devote a greater percentage of their income to transportation than richer motorists. Assuming that rich and poor have a more or less equal need to get to work or to visit Mom, this solution is manifestly unfair. Indeed, it closely resembles the free-market approach.

In environmental terms, it makes even less sense, because it targets the thriftiest car users for extinction and

## RESOURCES

### Publications:

**Clean Motion.** Environmental Action, 1525 New Hampshire Avenue, NW, Washington, DC 20036.

Starter kit on how to organize local efforts for cleaner transportation alternatives.

**Halting Global Warming.** P.M. Kelly (January 1990.) Climatic Research Unit, School of Environmental Sciences, University of East Anglia, Norwich NR4 7TJ, UK. Report prepared for Greenpeace International, Keizersgracht 176, 1016 DW Amsterdam, The Netherlands.

**"Cycling into the Future,"** Marcia D. Lowe for Worldwatch Institute's, *State of the World: 1990.* Worldwatch Institute, 1776 Massachusetts Avenue, NW, Washington, DC 20036.

**Rethinking the Role of the Automobile,** Michael Renner, Worldwatch Paper 84, June 1988. (See address above.)

**Global Trends in Motor Vehicles and Their Use: Implications for Climate Modification,** Michael P. Walsh. Report prepared for World Resources Institute, 1709 New York Avenue, NW, Washington, DC 20006.

**Facts and Figures '89,** U.S. Motor Vehicle Manufacturers Association, 1620 Eye St. NW, Suite 1000, Washington, DC 20006 (\$7.50).

### CONTACTS

Atmosphere and Energy Campaign, Greenpeace Action, Fort Mason, Building E, San Francisco, CA 94123.

National Clean Air Coalition, 1400 16th Street, NW, Washington, DC 20036.

Campaign for New Transportation Priorities, 236 Massachusetts Avenue, NE, Suite 603, Washington, DC 22202.

Richard Register, author of *Ecocity Berkeley: Building Cities for a Healthy Future* (North Atlantic Books, 1987) at Urban Ecology, P.O. Box 10144, Berkeley, CA 94709.

Fossil Fuels Action P.O. Box 8558 Fredericksburg, VA 22404

does little to slow the most profligate car users. Small wonder that the oil and auto industry is able to paint environmental regulation in "elitist" colors.

The only redeeming feature of the regulatory approach is the insistence that revenue from increased gas taxes be devoted to public transit, simultaneously clearing the air and providing alternative transport for displaced motorists. This will help buy time to ease the transition. But more is necessary, much more.

To make a rational transition to the post-auto age, it may be necessary to think the unthinkable: restrict car ownership to one car per family on average and ration gasoline. Appalling as this may sound, it is the most equitable way of coping with rising oil prices. It preserves, as long as possible, household access to car ownership regardless of income, provides more or less equal mileage to all users and, by stretching out the supply of gas, keeps it affordable longer. It would also help speed the transition to higher mileage and, eventually, pollution-free cars (cars powered by photovoltaics or by hydrogen fuel derived from solar-cell arrays) because it would provide an incentive to get the most out of every rationed gallon of gas.

The problem with this approach is that it is not likely to be adopted, at least in the United States. While European and other countries have levied high taxes on new cars and gasoline (gas costs \$3.03 a gallon in Portugal, \$3.80 in Italy and \$4.16 in the Ivory Coast), it seems Americans would sooner impale themselves on swords than raise taxes, restrict car ownership or ration gasoline.

Still, some people have begun to think the unthinkable. Former EPA administrator Lee Thomas has said that "the smog problem may well need to be dealt with by reducing the number of cars on the street, by telling people they can't drive nearly to the extent they have in the past."

This may be so, but it's difficult to imagine Congress passing laws to achieve these changes. "We have a fundamental problem," says car analyst Michael Walsh. "We haven't come up with political institutions that take the long view of serious problems. The car is a major cause of the deficit and of global warming and air pollution. Any serious attempt to deal with these problems will be painful. Trouble is, we just don't have the political mechanisms to impose pain on citizens in a democratic society."

In the absence of a willingness to adopt pain-inducing solutions, even fair ones, voters and politicians cede the problem to the market, which applies no-less-painful solutions in a discriminatory, chaotic way. Unless we act to minimize the problems caused by the automobile, it will continue to wreak social and environmental havoc even as it drives itself extinct. □



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**P**ERCHED NEAR THE EDGE OF THE Kwa Zulu "homeland" in the province of Natal, South Africa, Britain's Thor Chemicals has established what it claims is the world's largest mercury reprocessing facility. The plant is a testament to both the inadequacy of the country's commitment to environmental protection and the criminal lack of concern by multinational corporations for their conduct abroad.

Thor Chemical is releasing mercury into the environment, contaminating the water and soil that support hundreds of villagers, including refugees from South Africa's chronic political strife. The mercury comes from toxic waste delivered by clients, including Lederle Laboratories, a division of American Cyanamid located in Bound Brook, New Jersey. Some ten tons of waste are sent to Natal each year from Lederle, waste accumulated during the manufacture of products like heat-resistant hoses and engine seals.

Mercury pollution is extremely hazardous. It was responsible for the notorious avalanche of birth defects that plagued the town of Minimata, Japan. Among other things, mercury devastates the body's neurological system. Sediment samples taken by Greenpeace near the Thor plant at the head of the Mngweni River showed contamination as high as 1,760 parts per million, 8,800 times the limit the United States has established to define hazardous waste. Sediment samples taken further downstream, in the heart of the village of Fredville, also far exceed U.S. toxicity standards.

When it rains, mercury is carried from the plant down a steep slope into the Mngweni,

# OF APARTHEID

B Y J U D Y C H R I S T R U P

which is the lifeblood of small communities downstream. Children play in the river, while mothers wash their food and clothes in the flow. "This is gross contamination," Frank D'Itri, a leading mercury expert from Michigan State University told Bill Lambrecht of the *St. Louis Post-Dispatch*. "All hell would break loose if something like this were found in the United States."

**T**HE TRAGEDY UNFOLDING IN THE VALLEY of a Thousand Hills reflects the conflict among the imperatives of a South African elite desperate for foreign capital, the social impacts of a repressed population scratching out a subsistence existence under inhuman circumstances and the shadowy international trade in toxic waste. Nearly 200 companies have pulled out of South Africa since 1984 as a result of apartheid. But American Cyanamid and Thor Chemical stayed, taking advantage of South Africa's willingness to trade its environment for increasingly rare foreign investment.

It is the system of government itself that has created the problems. By moving more than half of the country's 23 million blacks onto 13 percent of the land, apartheid has seriously set back opportunities for economic renewal. "Widespread overgrazing, soil erosion and serious land degradation in the so-called

homelands...constitute the inevitable destructive consequences of apartheid," says the African National Congress' (ANC) Max Sisulu. And in the name of "development," dirty industries like Thor Chemicals are encouraged to set up shop next to the "homelands."

South Africa continues to allow the use of chemicals that other industrialized countries have banned for their extreme toxicity. A government-funded report shows that one of the deadly components of the herbicide Agent Orange—2,4,5-T—was found in rainwater in Natal Province. Concentrations of 2,4,5-T were 10,000 times higher than considered "safe" in the United States.

Mining, which makes up 73 percent of South Africa's exports, threatens the nation's water supply with mineralization, acidification and cyanide contamination. J.O. Kempe, writing for the technical journal, *Water, Science and Technology*, warns that "the effect of this on these resources will soon assume crisis proportions unless...rigid constraints [are] imposed."

South Africa does have environmental laws: the Atmospheric Pollution Prevention Act (APPA) of 1965, the Water Act of 1956, the Hazardous Substances Act, the Health Act, and most recently, the Environmental Act, passed in June 1989. But for the most part, these laws are toothless. For instance, the APPA calls for using the "best practicable means," to prevent pollution, which in practice permits ecological concerns to take a back seat to issues of cost and other considerations. The Water Act states that effluent from mines and factories should be purified, but to date only three standards have been set.

The new Environmental Act gives Environment Minister Gert Kotze wide discretionary powers in laying down antipollution regulations, but he must have the consent of the ministers of finance, economic affairs and technology. The Council for the Environment, which acts as advisor to the minister, has written detailed guidelines but its recommenda-



Children play at an illegal industrial waste dump in Natal Province.

© CHRIS ALBERTYN



# D AND POLLUTION

tions have no binding power. There are five people who monitor air quality in the whole country, and just one in the heavily industrialized province of Natal.

No one has ever been prosecuted in Natal for waste dumping or for air quality violations. Even if they were, the possible penalties amount to little more than a parking ticket. The maximum fine for illegal waste dumping—no matter how egregious the crime—is 400 Rands, about \$150. In contrast, illegal waste dumpers in Nigeria face life imprisonment.

What "conservationist" sentiment does exist in the South African government often takes the form of initiatives to extend wildlife reserves into homelands and traditional settlements, creating the possibility of an anticonservation backlash among blacks. "The people have long been alienated from the environment they live in," one black activist told the *Weekly Mail*. "Why should they now be asked to protect the very land that has been taken from them?" And as fieldworker Richard Clasney put it, "If conservation means losing water rights, losing grazing and arable land, and being dumped in a resettlement area without even the most rudimentary infrastructure and services...[it] can only promote a vigorous anticonservation ideology amongst the rural communities of South Africa."

**I**N DECEMBER, GREENPEACE CAMPAIGNER Jim Vallette and photographer/videographer Tony Marriner met with villagers who live downstream from the Thor plant. "They have no running water," says Vallette. "They are not sure of the hazards associated with Thor." One of the villagers from the settlement of Fredville, Doris Mbeje, said, "The river is not a good river. We don't drink from it...but the cattle do. People don't. They swim there and even adults go in there to bathe." Mbeje does not live here by choice. "We lived in Shongweni," she said. "From Shongweni we were chased out when my husband was killed....We left

Shongweni to come and live here." It was the cheapest place.

In addition to talking to local villagers, Vallette and Marriner met with representatives from Earthlife Africa, the country's leading environmental activist organization. Earthlife is less than two years old, with a membership of more than one thousand. They say their goal is to "create a society where protection of the environment is a precondition."

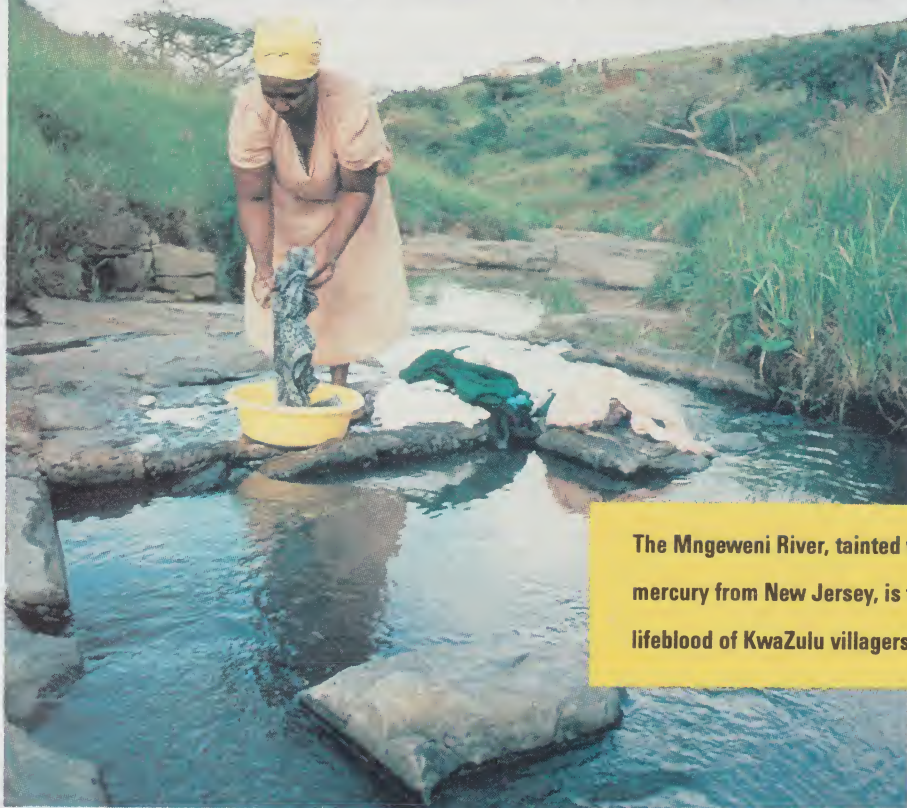
Earthlife showed Jim and Tony around Pietermaritzburg, the capital of Natal, where they found widespread illegal dumping. At one particularly frightening site, an unlawful waste trader had simply cleared a patch of land, dumped industrial waste—over four thousand barrels of unidentified industrial sludge—and left. The site bordered on squatters' shacks.

One man who lives 50 feet from the site was fearful of repercussions if he spoke out. He had once been fired, he said, for informing environmentalists about an unmonitored dump. When Marriner asked him if he could say where the drums are taken, he replied, "No, they will arrest me." Later, however, he agreed

to speak on camera: "They brought them back here. There are many children here. These [barrels] have been forgotten, and the kids can't find places to play. They don't go there anymore. Just like me." Earthlife hopes to use video footage such as this to generate public support for stronger toxic waste policing.

Despite the slim chance that their investigations and exposes will ever get a polluter arrested or fined, Earthlife continues its efforts in the hopes that one day things will change. At least they are on the right track. Recent reports of toxic pollution have increased environmental awareness in South Africa among people of all races. Members of the ANC say that their organization now includes environmental concerns in its agenda and debates. At a rally in Soweto last November, the ANC's Max Sisulu said, "There is a growing awareness within the movement on important ecological issues and the need to counter with vigor any degradation of the environment." There is even a new ANC slogan floating around: "It's time to put the green back in to the black, green and gold." □

© MARRINER/GREENPEACE



The Mngeweni River, tainted with mercury from New Jersey, is the lifeblood of KwaZulu villagers.



# THE BUMMERS:

12 NUCLEAR BOMBS THAT COULD RUIN THE 90s

BY WILLIAM M. ARKIN

THE MX, MIDGETMAN AND THE TRIDENT II D5 GET ALL THE HEADLINES. THE B-2 STEALTH BOMBER, WHICH COSTS MORE than its weight in gold, is turning budget-minded heads in Washington. But you probably didn't know that there is a war-fighter's dozen of obscure, expensive and increasingly irrelevant nuclear weapons moving toward active duty, an arsenal of Cold War dinosaurs that are oblivious to the thaw in international affairs. Together they have a price tag of some \$20 billion—\$15 billion of which could be saved if they were canceled today.

Two of these bidders, the Follow-On To Lance and the Navy's Tomahawk sea-launched cruise missile, have been discussed by Congress. Three others are included in the upcoming Strategic Arms Reduction Treaty (START) between the Soviet Union and the United States, but they slip through a loophole and are excluded from the 6,000-warhead limit each side agreed to as the goal of START. In other words, they are half on and half off the table. The rest are proceeding out of public scrutiny; there are no plans to include them in any negotiations or agreements in the future.

Each has its rationale, however thin and outdated, but on close examination the bidders appear more and more to be part of a last-ditch effort to keep the Department of Energy's massive nuclear weapons production complex in business. Without a variety of bombs in the pipeline, only one, the Trident-II D5, would be in production in the '90s. Here is a handy reader's guide to the Pentagon's dirty dozen.

## 1. ADVANCED CRUISE MISSILE

**Purpose:** Launched from bombers, this high-tech missile is designed to sneak by radar in the Soviet Union better than the missile it replaces, which was deployed less than 10 years ago to sneak by radar. There it will land directly on missile launchers, airfields and other military facilities.

**On duty:** late this year or in 1991.

**Home base:** Michigan, North Dakota, Texas, Washington.

**Savings if canceled:** nearly \$6 billion.

## 2. SHORT-RANGE ATTACK MISSILE II (SRAM-II)

**Purpose:** Launched from bombers, this missile will accurately blow up air defenses in the Soviet Union so the B-2 bomber can get through to blow up cities and other targets with nuclear bombs like the B83 Modern Strategic Bomb (see Bummer #3); will also seek out and destroy mobile missile launchers and command centers.

**On duty:** now being tested for production in 1993.

**Home base:** Kansas, Missouri, Texas, North Dakota, South Dakota.

**Savings if canceled:** \$2.4 billion.

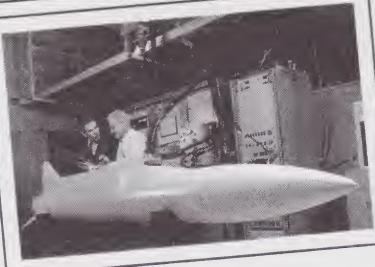
## 3. B83 MODERN STRATEGIC BOMB

**Purpose:** This blockbuster, equal to 70 Hiroshimas, will deliver the second half of the one-two nuclear punch, leveling cities and other targets deep in the Soviet Union after the SRAM-II (see Bummer #2) levels defenses in the countryside.

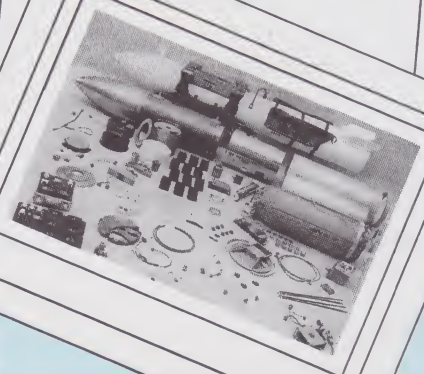
**On duty:** now in full-scale production.

**Home base:** Arkansas, California, Kansas, Louisiana, Michigan, New York, North Dakota, South Dakota, Texas.

**Savings if canceled:** depends on how many B-2 bombers get off the ground, but production costs are \$250 million a year, or about \$1 million per bomb.



TWENTY





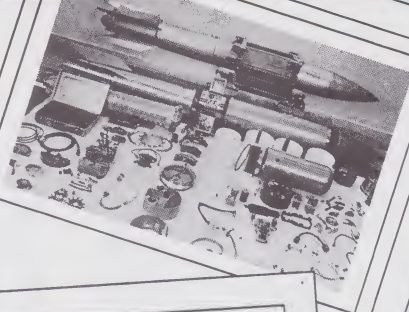
#### 4. SHORT-RANGE ATTACK MISSILE-TACTICAL (SRAM-T)

**Purpose:** Fired from warplanes, this missile is designed to do Bummer #2's job in Eastern Europe (home of Lech Walesa and Vaclav Havel). Also useful for aiming at North Korea.

**On duty:** now in development, to begin production in 1995.

**Home base:** Nevada, New Mexico, Italy, South Korea, United Kingdom, West Germany.

**Savings if canceled:** \$1 billion.



#### 5. B61 TACTICAL BOMB

**Purpose:** Little brother of Bummer #3, this bomb will be dropped on field targets such as military units or storage depots during a war in Eastern Europe or Korea as well as on targets along the Soviet Union's Black Sea and Pacific coast.

**On duty:** in full-scale production.

**Home base:** California, Hawaii, Louisiana, New Jersey, New Mexico, Nevada, Virginia, Belgium, Greece, Italy, Netherlands, South Korea, Turkey (watch out Armenia and Azerbaijan), United Kingdom, West Germany and assorted aircraft carriers.

**Savings if canceled:** unknown, but production costs are roughly \$200 million a year.

#### 6. FOLLOW-ON TO LANCE

**Purpose:** Designed to be launched from (West) Germany to destroy military units and storage depots in places like (East) Germany. When the two countries unify, Czechoslovakia will act as stand-in.

**On duty:** in development, to begin production in 1997.

**Home base:** California, New York, South Korea, West Germany, Italy.

**Savings if canceled:** \$750 million to \$1.25 billion.

#### 8. TOMAHAWK NUCLEAR LAND ATTACK MISSILE

**Purpose:** Launched from ships and submarines, this missile is designed to bounce the rubble after nuclear war has started. It is also aimed at naval bases and coastal airfields in the Soviet Union.

**On duty:** 1984, in full-scale production.

**Home base:** California, Hawaii, Virginia, South Carolina, New Jersey, Sardinia, Italy, warships and attack submarines.

**Savings if canceled:** \$1.25 billion.

#### 9. B90 NUCLEAR DEPTH/STRIKE BOMB

**Purpose:** A neat three-for-one package, this bomb can blow up submarines as well as surface warships and bases anywhere along the coasts of Eastern Europe, the Soviet Union or the Korean Peninsula. The B90 is the Navy's last nuclear hurrah, as they are deep into the process of shelving all the other nuclear weapons earmarked for ocean combat.

**On duty:** in development, to begin production in 1993.

**Home base:** Alaska, California, Florida, Hawaii, Maine, New Jersey, Virginia, Italy, United Kingdom, aircraft carriers.

**Savings if canceled:** \$1 billion.

#### IN DEVELOPMENT

#### 10. EARTH PENETRATOR WARHEAD

**Purpose:** After a nuclear war starts, and the SRAM-IIs have cleared the countryside and the B83s have razed the cities, this burrowing wonder will prove to the Soviets that all that stuff about invulnerable underground shelters is hokum.

**On duty:** no time soon, but they're trying.

**Savings if canceled:** unknown.

#### 11. HIGH-POWER MICROWAVE WEAPONS

**Purpose:** These bombs will fill the atmosphere and outer space with electronic noise to make sure that, in the event of a war, no one can fly, communicate or surrender.

**On duty:** more like on the drawing board.

**Savings if canceled:** at this point, some strategist's lunch hour.

#### 12. HYPERVELOCITY GLIDE VEHICLE

**Purpose:** To go very very very very fast.

**On duty:** hopefully never.

**Savings if canceled:** sleepless nights.

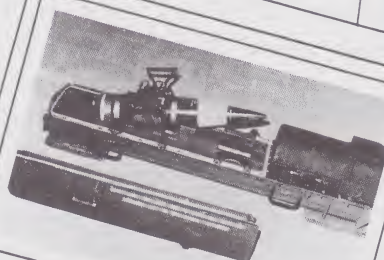
#### 7. 155 MILLIMETER FIRED ATOMIC PROJECTILE

**Purpose:** This little gem will be called into service when Bummer #6 can't do the job. Based in West Germany, Italy and Turkey, it can only be tossed about 20 miles, which means it will land in—you guessed it—West Germany, Italy or Turkey.

**On duty:** production to begin this year.

**Home base:** California, Hawaii, New Jersey, New York, Virginia, Greece, South Korea, Italy, West Germany, Turkey

**Savings if canceled:** \$500 million.



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Greenpeace blocks British ocean dumping.

## GREENPEACE LOG

## JANUARY

**10 Washington, D.C.** At a joint U.S.-Soviet meeting on environmental protection, Barry Commoner presents the case for Greenpeace that the Soviets should not use environmentally destructive technologies as they rebuild their economy.

**11 Prague, Czechoslovakia.** Campaigners begin working on opening a Greenpeace office here.

**15 East Berlin, East Germany.** Campaigners criticize export of West German waste to East Germany, where it is dumped in Schoenberg.

**15 Goesgen, Switzerland.** Activists blockade road to halt transport of spent nuclear fuel, which is destined for Sellafield, United Kingdom.

**17 Guatemala City.** With assistance from Greenpeace, Guatemalan officials cancel plan to use toxic incinerator ash for roadway construction.



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## NORTH SEA DIRT

TO PROTEST SERIOUS POLLUTION IN THE North Sea and the Baltic, Greenpeace activists launched a series of actions coinciding with the March 7 opening of the third North Sea Conference in The Hague.

Campaigners plugged discharge pipes in Delfzijl, the Netherlands, and Moss, Norway, and collected toxic effluent for delivery to a pulp and paper company in Karlsruhe, West Germany. "The time has come to agree on a goal of zero discharge into the North Sea by the year 2000," said campaigner Gier Wang-Andersen.

Earlier this year Greenpeace activists blocked the dumping of incinerator ash by a British ship off the east coast of the United Kingdom and plugged pipes at chemical factories and paper mills in Belgium, Sweden and Norway.

In 1987 ministers from eight North Sea countries, including Britain, agreed to stop ocean dumping by 1990. But Britain has continued to dump sewage sludge and industrial waste and to incinerate hazardous waste at sea well past this deadline.

Despite widespread condemnation of this behavior—the West German press refers to the British as Western Europe's leading *Schmutzfink* or "dirty slob"—British environmental secretary Chris Patten agreed only to

stop dumping sewage sludge and stop ocean incineration by 1991.

But other countries share the blame for North Sea pollution. "The measures agreed to by the ministers seem designed more to defuse public concern than to ensure the protection of the North Sea for future generations," said Greenpeace's Andy Booth.

## TOXIC TIRE FIRE

THE LARGEST TIRE FIRE IN NORTH AMERICA burned for 17 days in February and March in Hagersville, Ontario, before it was finally extinguished by weary fire fighters. The blaze at a dump containing 14 million used tires released millions of pounds of toxic gases into the atmosphere and 250,000 gallons of oil into the ground. Officials also found heavy concentrations of dioxin in water flowing from the inferno.

"This fire is an environmental tragedy of criminal proportions," said Greenpeace campaigner Jay Palter. He blamed the Canadian Ministry of the Environment (MOE) for failing to enforce fire-prevention measures at the site, which is owned by Tyre King Recycling.

Every year, 280 million used tires are added to the 2 to 3 billion tires piled in dumps across Canada and the United States. Tire recycling plummeted in the last decade from 30 to 10 percent, as consumers switched to

**17 Guatemala City.** Officials heed Greenpeace requests and announce that they will not build an oil refinery in the tropical rainforest of Laguna del Tigre.

**24 Bayonne, New Jersey.** City Council rescinds resolution that had invited Wheelabrator, Inc., to build the country's largest sludge incinerator, following vocal protests by Greenpeace and Bayonne Citizens for Clean Air.

**25 Yena Gap, Australia.** After discovering illegal dumping, activists plug Caltex's discharge pipes (see story).

**29 Washington, D.C.** Greenpeace releases Greenhouse report, which calls for a 30 percent reduction in carbon dioxide emissions by the year 2000 (see story).

**31 Washington, D.C.** At a press conference, Greenpeace warns U.S. and British navies that 50 nuclear warships have reactors that are based on faulty designs.

**All Month. Rainbow Warrior** monitors high-seas driftnets in South Pacific. *Gondwana* resupplies Greenpeace Antarctica base camp and ferries expedition to inspections and protests at other scientific bases.

## FEBRUARY

**1 Bad Wimpfen, West Germany.** More than 100 activists chain themselves to equipment at Kali-Chemical to protest production of ozone-depleting chemicals.

**2 Valencia, Spain.** Campaigners attempt to stop a nuclear-armed French aircraft carrier from docking. This is the first nuclear-free-seas action against a French warship.

**6 Washington, D.C.** Antarctica campaign announces support for Rep. Silvio



Conte's bill to protect Antarctica and ban mining there.

**6 Falun, Sweden, and Düsseldorf, West Germany.** Activists deliver rolls of chlorine-bleached paper to Stor Corporation offices in both cities to protest pollution of Baltic by dioxin and other organochlorines.

**8 Vancouver, British Columbia.** Campaigners in zodiacs challenge use of Canadian waters for torpedo testing by U.S. and Canadian navies.

**9 McMurdo, Antarctica.** Expedition stages protests at U.S. and New Zealand base camps, urging them to reject proposed mining treaty.

**9 Washington, D.C.** Campaigners petition Congress to mandate dramatic cuts in pesticide use in its farm bill.

**13 Washington, D.C.** Campaigners release film footage documenting the catch of non-target species in South Pacific driftnets.

**13 Toronto.** Greenpeace denounces new government regulations permitting continued discharge of dioxins and furans from pulp and paper mills.

**14 Cape Evans, Antarctica.** Expedition installs fourth over-wintering team at Greenpeace's World Park Base, the only non-governmental scientific research station on the continent.

**14 London.** Climbers hang a banner off Westminster Bridge to protest continued ocean dumping by Britain.

**14 Helsinki, Finland.** Greenpeace asks the Helsinki Commission to ban discharges of organochlorines into the Baltic by the pulp and paper industry.

**14 Yena Gap, Australia.** Based on new water samples, Greenpeace announces that Caltex, site of a direct action in January,

steel-belted radials and cheap foreign imports.

Growing tire dumps present a real fire hazard, and the number of tire fires doubled between 1987 and 1988. Some officials have advocated burning them in power-generating incinerators. "But if we incinerated all the tires in dumps," warns Palter, "we would introduce vast quantities of pollutants into the atmosphere." Instead, he argues, manufacturers should produce sturdier tires, promote retreads, and establish stringent fire-prevention regulations for existing dumps.



© TRAVER/GAMMA-LIAISON

## TARGETING PESTICIDE EXPORTS

ON MARCH 1, CONGRESS INTRODUCED LEGISLATION to ban the export of pesticides that cannot be used in the United States. "It makes no sense to allow American companies to dump unsafe chemicals abroad, only to have them show up back here in imported foods. This is the 'Circle of Poison,'" said Sen. Patrick Leahy (D-VT), a sponsor of the Senate bill.

U.S. producers supply one-quarter of the world's pesticides, but many of these pesticides are not registered for use in this country. According to Rep. Mike Synar (D-OK), 38 percent of all imported blackberries and one of every four shipments of pineapples are contaminated with pesticides that are not permitted here. "Do consumers really need to play fruit salad roulette with pesticides at their stores?" he asked.

Greenpeace Action campaigner Sandra Marquardt, who lobbied Congress to introduce the Pesticide Export Reform Act of 1990, said that it would "apply a single standard to pesticide use: if you can't use it here, you can't use it there." She said the bill would also require governments of pesticide-importing countries to give "Prior Informed Consent" before U.S. producers could sell U.S.-registered,

yet particularly hazardous pesticides abroad. "Congress is taking a bold step toward removing contaminants from our food. Placing controls on the export of these pesticides will also protect overseas farmers and the public from these threats," said Marquardt.

✦ **What You Can Do:** Write your congressional representatives, asking them to support the Pesticide Reform Act of 1990: S. 2227; H.R. 4219.

## PIPES DOWN

GREENPEACE CAMPAIGNERS LONG SUSPECTED that the Caltex oil refinery in Yena Gap, Australia, was illegally dumping toxic wastes. Determined to force the hand of the Texaco subsidiary and the State Pollution Control Commission (SPCC) in New South Wales, toxic campaigners based on the *SV Redbill* sampled water from the plant's discharge pipe on January 15. The samples showed that the company was dumping nearly six times the amount of phenol compounds as its license permitted. With this evidence, a Greenpeace team returned to the site on January 25 and, for the first time in Australian history, plugged a chemical company's discharge pipe.

On February 1, Caltex's license to pollute expired. The next day Greenpeace once more collected water samples to determine whether the company was dumping hazardous waste, this time without a valid licence. Prodded by these actions into doing its job, the SPCC announced later that day that it would prosecute Caltex for pollution violations and rejected a company application for a 12-month license, issuing only a three-month license.

Two weeks later, campaigners revealed that the February 2 samples showed contaminants far in excess of allowable levels. "There has been enough talk," said campaigner Paul Gilding. "The state government must move to close the Caltex pipes. The government's unwillingness to take decisive action means that the waters of New South Wales are being poisoned with almost no controls."

Greenpeace revelations about illegal dumping and lax enforcement received widespread coverage in the national press, highlighting environmental issues on the eve of the country's March elections.

is still dumping toxic waste without a license (see story).

**15 Tromsø, Norway.** Campaigners demand that fisheries minister reject proposals to let hunters kill 34,400 seals in 1990 (see story).

**15 Sydney, Australia.** Responding to direct actions by Greenpeace, government officials announce they will refuse to refuel ships engaged in high-seas driftnetting.

**19 Saskatchewan, Canada.** Charges against climbers who hung banner from a uranium mining company building are dismissed.

**19 Oslo, Norway.** Activists block harbor entrance of Tofte Industries, which discharges chlorinated organic compounds into the sea from its pulp and paper mill (see story).

**19 Luxembourg.** Activists hang a banner protesting production of PVC plastics at the Beckerich mineral-water company.

**20 Antwerp, Belgium.** Campaigners plug BASF's waste pipe, which discharges toxic pollutants into the North Sea.

**20 Ottawa.** At a press conference, Greenpeace criticizes Canadian government for failing to cut defense spending substantially.

**21 Auckland, New Zealand.** Greenpeace calls on government to ban the export of wood chips from its rainforests.

**21 Taipei, Taiwan.** Officials announce they will phase out driftnet operations and ban their use by mid-1992.

**22 Port Kembla, Australia.** Activists plug BHP pipes to protest discharge of cyanide and other toxic wastes.

**22 Prince George, British Columbia.** Activists protest



waste discharges into Fraser River by three pulp mills in the area.

**22 Stenungsund, Sweden.** Campaigners return plastic rubbish found in the Baltic to one of its producers; Neste Oxo.

**23 Dumont d'Urville, Antarctica.** Activists place 50 wooden penguins on French airstrip, which threatens penguin-breeding colonies.

**23 Brussels, Belgium.** Greenpeace submits critique of the upcoming conference on North Sea protection (see story).

**24 Dumont d'Urville, Antarctica.** Protesters occupy airstrip for second day, demand halt to construction.

**24 Copenhagen, Denmark.** Activists in inflatables attempt to stop nuclear-armed British aircraft carrier from docking.

**25 Brussels, Belgium.** The European Community announces it will propose banning driftnets in European waters, first in the Atlantic and Baltic and then in the Mediterranean.

**26 Auckland, New Zealand.** Greenpeace welcomes government's decision to "set aside" consideration of treaty that would open Antarctica to mining.

**26 Brussels, Belgium.** Greenpeace condemns Norway's decision to proceed with 1990 seal hunt (see story).

**26 East Berlin, East Germany.** Greenpeace announces the opening of an office here.

## MARCH

**1 Tyneside, United Kingdom.** Climbers scale a sludge-loading facility to prevent ship from loading and then dumping sludge at sea.

## SORRY CHARLIE, TRUTH IN LABELING

TO HELP CONSUMERS IDENTIFY WHICH TUNA is caught by dolphin-safe fishing methods, the U.S. Congress introduced legislation in January that would require tuna producers to label their products. According to Rep. Barbara Boxer (D-CA), a sponsor of the Dolphin Protection Consumer Information Act of 1990, tuna caught with purse-seine nets intentionally set on dolphins in the Eastern Tropical Pacific or with drift-gill nets over 1.5 miles long would have to be labeled. These products would bear the statement, "The tuna in this product has been captured with technologies known to kill dolphins." All other tuna products would be labeled: "Dolphin safe."

As this issue goes to press, the need for prompt passage of labeling bills in both the House and the Senate is greater than ever. Star Kist, the largest supplier of canned tuna to the U.S. market, has announced its intention to begin buying and selling only "dolphin-safe" tuna within three months. A federal labeling program is the only way for Star Kist to verify that the tuna it purchases was not caught at the expense of dolphins.



Divers attached banner to Japanese driftnet in Tasman Sea.

**What You Can Do:** Please contact your representatives and urge them to pass the labeling measure; H.R. 2926 and S. 2044. Also write Greenpeace Action, 1436 U Street, NW, Suite 201A, Washington, DC, 20009, for information on joining the Cetacean Action Network (CAN).

## SEALS THREATENED

ON FEBRUARY 15, GREENPEACE ASKED Norwegian Minister of Fisheries Svein Munkjord to reject recommended harp and hooded seal quotas and terminate Norway's seal hunt. The Norwegian Sealing Council proposed in January that 11,100 harp and 30,000

**2 Washington, D.C.** Congress introduces legislation curbing U.S. pesticide exports; Greenpeace Action begins lobbying for passage of the Pesticide Export Reform Act (see story).

**6 Madrid, Spain.** Greenpeace asks government to stop Spain from incinerating its hazardous wastes in the North Sea.

**6 Moss, Norway.** Activists block discharge pipe at Peterson & Son's pulp mill to protest dioxin contamination of the North Sea (see story).

**7 Karlsruhe, West Germany.** Activists collect waste water from Holzmann's pulp mill, one of the Rhine's biggest polluters, and deliver it in barrels to company headquarters and government officials to protest North Sea pollution (see story).

**7 Delfzijl, Netherlands.** Campaigners block waste pipe of the Akzo chemical company to protest North Sea pollution (see story).

**14 Washington, D.C.** Greenpeace releases report by Barry Commoner debunking claims made for "biodegradable" plastics.



Campaigners protest production of ozone-depleting chemicals in West Germany.

*The Campaigns section was paid for by Greenpeace Action. Greenpeace Action is a sister organization of Greenpeace USA that promotes environmental protection and disarmament through grassroots organizing, education and legislation.*



hooded seals be taken from the Greenland Sea, which would be shared by Norwegian and Soviet hunters, and another 9,500 harp seals by Norwegians in the Soviet Union's White Sea.

In a letter to Munkjord, Greenpeace argued that all three seal populations are severely depleted and deserve protection. Aerial surveys of breeding female harp seals in the White Sea have shown a 49 percent decline in the population between 1985 and 1988. "To exploit such depleted populations is irresponsible and dangerous," said Greenpeace campaigner Michael Earle.

## TURNING DOWN THE HEAT

WHILE THE BUSH ADMINISTRATION DEFERS action on global warming, Greenpeace asked P.M. Kelly, one of the world's leading climatologists, to determine what it would take to "halt the rise in the effective carbon dioxide content of the atmosphere by the year 2030." The answer, contained in the *Halting Global Warming* report, which was presented to the plenary session of the U.N.'s Intergovernmental Panel on Climate Change on February 6, is sobering. The production of ozone-depleting and earth-warming chlorofluorocarbons would have to be stopped by 1995, net deforestation worldwide halted by the year 2000, and energy-related emissions of carbon dioxide reduced to 30 percent of current levels by the year 2030.

The report is meant to serve as a "benchmark" against which government proposals and industry initiatives can be measured. Obviously, any serious effort to halt global warming will require dramatic change. For example, if carbon dioxide emissions were to be reduced to 30 percent of current levels, and if emissions were allocated on a worldwide per capita basis, U.S. citizens would have to reduce emissions by 95 percent, Europeans by 88 percent.

### What You Can Do: Write your U.S.

Representative and ask him/her to support the Global Warming Prevention Act (H.R. 1078), which provides for a nuclear-free solution to global warming. The act would shift money toward energy efficiency and solar technologies and slow tropical deforestation.

## RAINFOREST SORROWS

THAILAND RECENTLY BANNED LOGGING within its own borders, due to intense deforestation. But Burma's military government is allowing Thai loggers to strip its teak forests in order to finance its repressive campaign against tribal communities and other opposition groups. The processed teak and other tropical woods are exported to the United States and other countries. To discourage the destructive Burmese policies, Sen. Moynihan (D-NY) and Rep. Matsui (D-CA) have introduced bills that would ban the import of tropical timber and fisheries products from Burma. Please write a letter of support to Rep. Dan Rostenkowski, Chairman of the House Ways and Means Committee and to Sen. Lloyd Bentsen, Chairman of the Senate Finance Committee.

## SEASHORES THREATENED

OFFSHORE OIL DEVELOPMENT THREATENS TO put U.S. seashores on the auction block. The annual Congressional moratorium on funding for offshore drilling will provide temporary relief from lease sales and exploration, and the Ocean Protection Act (H.R. 3751) offers permanent protection to vast areas of the coast. Write your congressional representatives and your governor, urging them to support both the moratorium and the landmark Ocean Protection Act. Energy conservation and preservation of the ocean is far more valuable than limited, non-renewable offshore oil reserves.

## STOP WASTE TRADE

GREENPEACE ACTION IS CIRCULATING PETITIONS for a ban on exporting and importing hazardous wastes. Write: Greenpeace Action International Waste Trade Project, 1436 U Street, NW, Suite 201A, Washington, DC 20009. In Canada: Yves Corriveau, Greenpeace Canada, 2444 Notre Dame Ouest, Montreal, Quebec H3J 1N5.

## ANTARCTIC BILLS

ASK YOUR SENATORS TO SUPPORT SENATE Joint Resolution 206 introduced by Sen. Gore (D-TN) and your representative to support House Joint Resolution 418. These resolutions would put Congress on record as supporting a ban on minerals exploitation in

Antarctica and seeking the preservation of Antarctica as an ecological commons. They will send a message to the Bush Administration that it must stop supporting the minerals treaty (CRAMRA). Also ask them to support Rep. Conte's (R-MA) bill, H.R. 3977, which would mandate a permanent ban on minerals development in Antarctica.

## STRENGTHEN WHALE PROTECTION

BY STRENGTHENING THE EXISTING PELLY Amendment, H.R. 4289 would compel the U.S. government to sanction nations that do not comply with the International Whaling Commission's moratorium on whaling. Ask your Congressperson to support this bill.

## THREAT OF WAR

THE SENIOR EDITOR OF *GREENPEACE*, Robert Schaeffer, has written a book explaining the origins of social conflict, conventional war and the threat of nuclear war in Korea, China, Vietnam, India, Pakistan, Palestine, Cyprus, Germany and Ireland—countries that have been divided in this century. *Warpaths: The Politics of Partition* is available for \$22.95 at bookstores or from Hill and Wang, 19 Union Square West, New York, NY 10003; 1-800-631-8571.

## ANTARCTIC 1991-92 OVERWINTERERS NEEDED

**Base Leader:** Skilled in mountaineering and sea-ice travel. Previous work in polar climates, in isolation, and in leading small groups under adverse conditions preferable. Will be chief Greenpeace representative in Antarctica. Responsible for base activities and field trips. Will maintain base machinery and systems.

**Medical Doctor/Nurse/Paramedic:** Experienced in emergency medical procedures. Prepared to accept rigors of isolation and working under extreme conditions. Expected to assist research program and base projects.

**Radio Technician:** Able to maintain and repair HF and VHF communications systems. Experienced in digital computer communications, HF antenna theory, and satellite installation and maintenance. Amateur radio license a plus. Some knowledge of wind and solar energy systems useful. Will also maintain base electrical systems.

**Scientist/Technician:** Will continue environmental pollution monitoring program, study marine zooplankton and fish during the winter darkness, and observe seasonal variations in nearby freshwater lakes. Knowledge and field experience in pollution or environmental studies, especially in polar regions, essential; biological background helpful.

Positions open to men and women in excellent health. Previous polar/Antarctic experience, mountaineering skills and experience in cold weather isolation in small groups helpful. Commitment required from September 1990 to March 1992. Specialized instruction, including Antarctic survival training, provided as required. Send resume to: Nancy Foote, Greenpeace, 1436 U Street, NW, Washington, DC 20009.

To lobby your representatives and senators in Washington, write them C/O U.S. House of Representatives, Washington, DC 20515 or U.S. Senate, Washington, DC 20510.



## NAMES AND FACES

Thank you for your article "What Works: An Oral History of Greenpeace Campaigns" (*Greenpeace*, January/February 1990). As a new member of Greenpeace, I was happy to learn about past campaigns. Reading the article made me proud to be a member.

*Dina Arel*  
Albany, New York

I was disappointed with the January/February issue; all those white faces telling us what needs to be done. Only two persons of color, when we are the majority of the earth's people. My own concern is testament that yes, we care, and yes, we are watching.

*Guillermo Gonzalez*  
San Francisco, California

## OTHER WAYS TO SAVE IT

"How We Can Save It," in the January/February 1990 issue of *Greenpeace*, asked increasingly relevant questions. However, most of the opinions addressed the symptoms of the problem rather than the single cause behind every environmental crisis: overpopulation. The time has come for Greenpeace to make population control a global and domestic priority. Be bold, Greenpeace, because if you won't be, who will?

*Jerry Reid*  
Killingworth, Connecticut

What impressed me the most about "How We Can Save It" was the variety of good views expressed. The ecology movement speaks frequently of unity and whole systems, but often it is diversity that we need. One useful phrase can be found on every American coin. "E Pluribus Unim" translates as "One Out of Many." It's a phrase that ecologists should carry into the next century, as it will take great flexi-

bility, listening and tolerance to resolve the world's difficulties.

*Robert Murphy*  
Providence, Rhode Island

Native North American Indian Nations have a tradition that respects the Earth and all of nature. You had no Native American Indian speaker. This was a terrible omission of the very philosophies that could be our guide.

*Anonymous*  
Hartford, Connecticut

Your insightful feature was titled "How We Can Save It." This is too optimistic. It should have been phrased as a question—"Can We Save It?"—the answer to which is "no." The multitudes will not voluntarily make the personal sacrifices needed for the environment until they are choking to death from such disregard, and by then it will be too late. Don't get me wrong. I'm in this battle to the end, but I fully expect it to come to that.

*Louis Philips*  
Albany, New York

The visions expressed in "How We Can Save It" include a lot of wistful sixties-isms. It is not lifestyle changes by individuals that will have the most impact on the planet, but major, drastic changes in the way resources are extracted, used and distributed among countries. Individuals working locally for ecological concerns is a fine thing, but it is not enough. We need to put pressure on the powers that be.

*Judith Bernstein*  
Ashland, Oregon

I admire and support your work, but I read and wait for you to say plainly that socialism must now replace capitalism. Inherent in capitalism is exploitation of resources and humans,

and this is intolerable. I hope you do not fall into the trap of thinking that well regulated capitalism is sufficient!

*Morris Carrell*  
Vancouver, British Columbia

"How We Can Save It" might better have been called "How We Can Save Ourselves," for, as *Chicago Tribune* reporter Casey Bukro wrote, "after decades of global concern over environmental pollution, the final frontier is what it all means to human health."

Our bodies have become toxic dumps. The National Human Adipose Tissue Survey of 55 toxic chemicals in human body fat has found 30 of these toxins in more than 50 percent of samples tested. PCBs and dioxins are found in mothers' milk, and industrial chemicals in umbilical cords.

*Lynn Lawson, Human Ecology Action League*  
Atlanta, Georgia

I wish you had invited *Diet for a New America* author John Robbins to write about a step that everyone can take to save the environment: vegetarianism. Meat is an inefficient food; the land needed to feed one meat-eater will feed twenty pure vegetarians. Meat, egg and dairy production account for one-third of the raw materials and half the water consumed in the United States. And if Americans cut meat consumption by just 10 percent, they would save enough grain to feed the 60 million people who die of starvation each year.

*Brett T. Garrett*  
La Jolla, California

There is wisdom in "How We Can Save It," but I was disturbed that rationalism, humanism, scientific method, the idea of progress and improved standards of living are seen as the root cause of the ecological crisis. Granted, sci-

## G R E E N P E A C E M A G A Z I N E

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ence and technology have increased our capacity for destruction, but they have also increased our understanding of the earth's ecosystem and our ability to deal with practical problems. The problem we have today and always will have is how to use technology wisely. Why put a negative interpretation on a trait that is so much a part of our nature?

Allan Smith  
Pennington, New Jersey

Why didn't *Greenpeace* solicit more opinions from the politicians who run this country? As much as we are all disgusted with the politicians being found in the hip pockets of big business, they are the people who make decisions for us now and in the future.

Michael J. Skinner, *Chattahoochee Nature Center*  
Roswell, Georgia

## EARTH FIRST! DEFENSE

Rod Jones' letter in the January/February 1990 issue grossly exaggerates the perils of tree-spiking. I am a veteran professional tree-

trimmer and have hit plenty of nails, pieces of concrete, hard metal and rocks with my chainsaw without any hazard beyond dulling the chain. Almost all the old-growth has already been logged and its biodiversity permanently crippled by these loggers who are being scrupulously protected from imagined injuries as they kill what's left.

Joe Smith

I appreciate Rod Jones' letter, but I see things differently. The global situation is awful and urgent. The bottom line is that millions of people and thousands of species are sure to die before our culture becomes sustainable. None of us can afford to waste energy criticizing another's response to this transformative era. Anyone who explores Earth First!, its literature and its people, will find tremendous creativity.

Allen Feibelman  
Cincinnati, Ohio

It is obvious that Rod Jones has never read *"Ecodefense: A Field Guide to Monkey-*

*wrenching.*" which tells ecodefenders to mark any trees they spike. Earth First! is against physical violence or midguided monkey-wrenching. Dave Foreman is doing what any courageous person would do if he or she came upon a victim being assaulted—in this case the victim is Mother Earth and her helpless creatures.

Roberta Brunelle  
Tisbury, Massachusetts

## REACHING OUT

Every time I see another copy of *Greenpeace* in my mail box, I say to myself, "Greenpeace. Oh, no, I'm not going to send them any more money. I can't afford it." But then I decide to flip through the pages just to see what you've been up to, and before I know it I've read every word and I have my checkbook out. You say and do what I think are the most urgent things on the world agenda. Here's hoping you'll reach more and more of us.

Malcolm Wells  
Brewster, Massachusetts

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Peter Bahouth,  
Executive Director  
Greenpeace

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